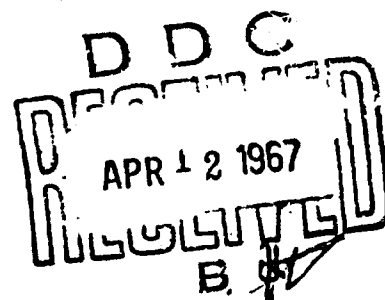
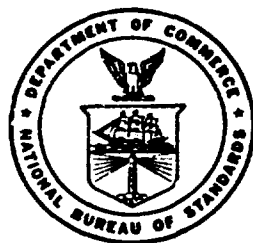


AD649862

**Bibliography of Low Energy Electron  
Collision Cross Section Data**



United States Department of Commerce  
National Bureau of Standards  
Miscellaneous Publication 289

Best Available Copy

**ARCHIVE COPY**

## THE NATIONAL BUREAU OF STANDARDS

The National Bureau of Standards<sup>1</sup> provides measurement and technical information services essential to the efficiency and effectiveness of the work of the Nation's scientists and engineers. The Bureau serves also as a focal point in the Federal Government for assuring maximum application of the physical and engineering sciences to the advancement of technology in industry and commerce. To accomplish this mission, the Bureau is organized into three institutes covering broad program areas of research and services:

**THE INSTITUTE FOR BASIC STANDARDS** . . . provides the central basis within the United States for a complete and consistent system of physical measurements, coordinates that system with the measurement systems of other nations, and furnishes essential services leading to accurate and uniform physical measurements throughout the Nation's scientific community, industry, and commerce. This Institute comprises a series of divisions, each serving a classical subject matter area:

—Applied Mathematics—Electricity—Metrology—Mechanics—Heat—Atomic Physics—Physical Chemistry—Radiation Physics—Laboratory Astrophysics<sup>2</sup>—Radio Standards Laboratory,<sup>3</sup> which includes Radio Standards Physics and Radio Standards Engineering—Office of Standard Reference Data.

**THE INSTITUTE FOR MATERIALS RESEARCH** . . . conducts materials research and provides associated materials services including mainly reference materials and data on the properties of materials. Beyond its direct interest to the Nation's scientists and engineers, this Institute yields services which are essential to the advancement of technology in industry and commerce. This Institute is organized primarily by technical fields:

—Analytical Chemistry—Metallurgy—Reactor Radiations—Polymers—Inorganic Materials—Cryogenics<sup>2</sup>—Materials Evaluation Laboratory—Office of Standard Reference Materials.

**THE INSTITUTE FOR APPLIED TECHNOLOGY** . . . provides technical services to promote the use of available technology and to facilitate technological innovation in industry and government. The principal elements of this Institute are:

—Building Research—Electronic Instrumentation—Textile and Apparel Technology Center—Technical Analysis—Center for Computer Sciences and Technology—Office of Weights and Measures—Office of Engineering Standards Services—Office of Invention and Innovation—Clearinghouse for Federal Scientific and Technical Information.<sup>3</sup>

<sup>1</sup> Headquarters and Laboratories at Gaithersburg, Maryland, unless otherwise noted; mailing address Washington, D. C., 20234.

<sup>2</sup> Located at Boulder, Colorado, 80302.

<sup>3</sup> Located at 5285 Port Royal Road, Springfield, Virginia, 22151.

ACCESSION NO.	
CPRTI	WHITE SECTION <input checked="" type="checkbox"/>
DOC	BUFF SECTION <input type="checkbox"/>
UN ANNOUNCED	<input type="checkbox"/>
STIFICATION	
DIST. BUTON/AVAILABILITY CODE	
DIST.	AVAIL. and/or SPECIAL
1	24

UNITED STATES DEPARTMENT OF COMMERCE

Alexander B. Trowbridge, *Acting Secretary*

NATIONAL BUREAU OF STANDARDS • A. V. Astin, *Director*

# Bibliography Of Low Energy Electron Collision Cross Section Data

L. J. Kieffer

Laboratory Astrophysics Division  
Institute for Basic Standards  
National Bureau of Standards  
Boulder, Colorado 80302



National Bureau of Standards Miscellaneous Publication 289

Issued March 10, 1967

For Sale by the Superintendent of Documents, U.S. Government Printing Office  
Washington, D. C., 20402 - Price 50 cents

Library of Congress Catalog Card Number: 67-60033

## CONTENTS

	Page
INTRODUCTION-----	v
BIBLIOGRAPHY: ELECTRON PAPERS	
Total Elastic Scattering Experimental-----	1
Total Elastic Scattering Theoretical-----	1
Differential Elastic Scattering Experimental-----	2
Differential Elastic Scattering Theoretical-----	2
Electronic Excitation Experimental-----	3
Electronic Excitation Theoretical-----	5
Electron Detachment Experimental-----	7
Electron Detachment Theoretical-----	7
De-Excitation Experimental-----	7
De-Excitation Theoretical-----	7
Ionization Experimental-----	8
Ionization Theoretical-----	10
Dissociation Experimental-----	11
Dissociation Theoretical-----	11
Free-Free Emission Theoretical-----	11
Dissociative Ionization Experimental-----	11
Dissociative Ionization Theoretical-----	12
Radiative Attachment Experimental-----	12
Radiative Attachment Theoretical-----	12
Dissociative Recombination Experimental-----	12
Dissociative Recombination Theoretical-----	12
Radiative Capture or Recombination Experimental-----	12
Radiative Capture or Recombination Theoretical-----	13
Rotational Excitation Experimental-----	13
Rotational Excitation Theoretical-----	13
Vibrational Excitation Experimental-----	13
Vibrational Excitation Theoretical-----	13
Dissociative Attachment Experimental-----	13
Dissociative Attachment Theoretical-----	14
Total Scattering Experimental-----	14
Total Scattering Theoretical-----	15
POSITRON PAPERS	
Total Elastic Scattering Experimental-----	16
Total Elastic Scattering Theoretical-----	16
Differential Elastic Scattering Theoretical-----	16
Electronic Excitation Theoretical-----	16
Electron Detachment Theoretical-----	16
Ionization Theoretical-----	16
BIBLIOGRAPHIC REFERENCES-----	17
AUTHOR INDEX-----	78

## BIBLIOGRAPHY OF LOW ENERGY ELECTRON COLLISION CROSS SECTION DATA†

L. J. Kieffer

A bibliography of low energy electron collision cross section data is presented. Only references which report original measurements or calculations of electron collision cross sections are included. The cross section data for each process are listed by atomic species in order of their atomic number. The data for molecules are listed in arbitrary order.

Key Words: atom, molecule, electron, collision  
cross section

### INTRODUCTION

The Joint Institute for Laboratory Astrophysics (JILA) maintains an Information Center for collecting reports which contain information of interest to plasma physicists and astrophysicists. Because of the availability of information from other data centers, our scope is confined to low energy atomic collision data. Our obligation to the National Standard Reference Data System requires that we make available to the general scientific and technical community critically evaluated data for electron and photon collisions with atoms and simple molecules.

This Bibliography has been issued previously in report form (JILA Reports #4 and #34, and JILA Information Center Report #2). All previous versions of this bibliography, and this one, have included all of the bibliographic material in our files at the time of publication. The current literature for this publication was searched through October 1966. Because we rely upon the abstracting journals to obtain references from sources which do not in general contain information of interest, there may be some material from late 1966 which is not included in this bibliography. The current scientific literature will be searched for this material on a continuing basis and all future bibliographic material will be issued in conjunction with the publication of critically evaluated data.

† This research was supported in part by the Advanced Research Projects Agency (Project DEFENDER), monitored by the U. S. Army Research Office-Durham, under Contract DA-31-124-ARO-D-139 and in part by the National Bureau of Standards through the National Standard Reference Data Program.

### Electron Scattering Cross Section Bibliography

The criterion used in choosing the references for this bibliography is that the publication contain original measurements or calculations of electron cross sections in the energy range 0 to 10 KeV for specific atomic or molecular targets. The upper limit on the energy was not used as an absolute limit but indicates the order of magnitude of interest. This means that one should not expect to find electron collision cross sections in the range of 50 KeV and above.

Papers containing the following quantities, which are not explicitly cross sections, have also been collected:

1. phase shifts,
2. scattering lengths,
3. ionization efficiencies,
4. excitation efficiencies.

The reason for including these quantities is that under the proper conditions cross sections have been or can be simply derived from them.

Published manuscripts, theses, reports given at meetings, and company or agency reports which have been printed and circulated are included in the bibliography. However, reference is not made to material that is unavailable either through library facilities or government document centers. (No classified material is included.)

There is a tendency for authors to publish material which is identical to that which they have reported on at a meeting (which is printed and circulated) and also issued as a company or agency report. In some cases it is possible to verify that this is so and in those cases only one reference (the formal publication if there is one) is kept in our bibliography. In most cases it is not possible to make such a precise distinction among such documents, since only some of the material may have been made available before. Because of this, there may be cases of duplication in the sense that there may be more than one reference to the same original data. We have tried to keep this to a minimum consistent with our aim of collecting all published data.

Inclusion of a reference in this bibliography does not imply a value judgment about the accuracy of the information. We only assert that this reference reports a measured or calculated electron collision cross section (or the equivalent as described previously). The question of the accuracy of the data is to be covered in separate published critical reviews [see, for example, Reviews of Modern Physics, 38, 1, (1966)].

### Description of the Bibliography Format

The Electron Cross Section Bibliography is divided into three main sections. The first section describes the data which are in the references included in the bibliography. The data are categorized by a

hierarchy of descriptors in the following order:

1. Process (e.g., elastic scattering, electronic excitation, etc.)
2. Experimental or Theoretical
3. Normalized or Relative  
(The data are considered normalized if given in absolute units.)
4. Atomic or Molecular Species including the degree of ionization of the species.  
(A negative ion is indicated by a minus sign; neutral unexcited species by a blank; neutral excited species by a star; and a positive ion by a number indicating the degree of positive ionization. All of these symbols follow the atomic species, which are listed in ascending order of nuclear charge, Z. Molecular species are listed in arbitrary order.)
5. The references in which the data described are found.  
The references are identified by an arbitrary file number, the first author and the year of publication (e.g., 63 implies 1963).

The following comments about categories (see Contents) are necessary in order to use the bibliography properly. Category ELASTIC SCATTERING, for theoretical papers, includes all references to elastic scattering cross section computations except differential elastic scattering cross section references, which are given in a separate category. In the case of experimental papers only those references in which cross section measurements were reported with energy discrimination for the scattered electrons are included under ELASTIC SCATTERING.

Category TOTAL SCATTERING includes theoretical papers which give a total cross section which is the sum of elastic and inelastic cross sections. It also includes any references to experimentally determined cross sections in which the experiment does not distinguish between elastically and inelastically scattered electrons even if the experiment is carried out in an energy range in which only elastic scattering is expected.

The second section lists the title, authors and complete reference for the paper cited. These are ordered by their "file" number.

The abbreviations for journal titles are taken from Chemical Abstracts or if not abstracted there, from Science Abstracts, Section A: Physics Abstracts.

The third section consists of an alphabetical author index. After each name is a list of the "file" numbers of articles authored or co-authored to be found in the bibliographic section.



The author would like to gratefully acknowledge the assistance of the staff of the JILA Information Center. The computer programs used for this report were written by Patricia Ruttenberg. The manuscript was prepared by Mary Ann Lefler and Elizabeth Hosack.

## ELECTRON PAPERS

TOTAL ELASTIC SCATTERING		EXPERIMENTAL	TOTAL ELASTIC SCATTERING		THEORETICAL
NORMALIZED			NORMALIZED		
N	0933 CODY.64		N	0490 SCHWARTZ.61	0495 NOISEWITCH.63
NE	0273 ALLEN.37	0274 GOLDAN.63	0490 TENKIN.63	0503 TENKIN.63	0503 TENKIN.63
	0330 WESTIN.49	0637 LANGMUIR.28	0512 TENKIN.63	0527 MALIN.60	0527 MALIN.60
	0734 GRAHAM.54		0537 CHIDVAN.59	0542 LANGMUIR.62	0542 LANGMUIR.62
NE	0273 ALLEN.37	0320 WESTIN.49	0543 STAYER.49	0552 MORA.61	0552 MORA.61
	0637 LANGMUIR.28	0734 GRAHAM.54	0553 MITTLEMAN.62	0568 VERLENKO.63	0568 VERLENKO.63
NA	0679 DEMMELT.50		0561 OMURA.60	0567 HU.60	0567 HU.60
AR	0273 ALLEN.37	0292 ENGELHARDT.64	0571 MCEACHMAN.61	0584 PERCIVAL.57	0584 PERCIVAL.57
	0330 WESTIN.49	0637 LANGMUIR.28	0700 TENKIN.61	0712 BURKE.61	0712 BURKE.61
	0734 GRAHAM.54	1999 HAZING.66	0716 VERLENKO.64	0722 LAMSON.61	0722 LAMSON.61
NR	0739 CHEN.63		0744 MCEACHMAN.63	0795 KAMENETSKII.61	0795 KAMENETSKII.61
RO	0522 BALLING.64		0812 ROBINSON.61	0825 MCEACHMAN.60	0825 MCEACHMAN.60
XE	0739 CHEN.63		0854 DAMBURG.63	0859 SMITH.60	0859 SMITH.60
CS	1346 BALLING.64	1999 HAZING.66	0864 MALIN.64	0879 MALIN.60	0879 MALIN.60
HO	0669 ARNOT.35	0637 LANGMUIR.28	0896 SMITH.60	0897 RUTT.64	0897 RUTT.64
HO	0260 ENGELHARDT.53	0637 LANGMUIR.28	0899 JOHN.60	0903 PU.63	0903 PU.63
NE	0381 LASSETTRE.57	0637 LANGMUIR.28	0904 KYLE.64	0908 KYLE.64	0908 KYLE.64
CO	0374 LASSETTRE.53		0935 OCHURN.58	0967 GREENBERG.57	0967 GREENBERG.57
DZ	0260 ENGELHARDT.53		0980 SCHWARTZ.62	0981 MURRAY.63	0981 MURRAY.63
RELATIVE			1009 BURKE.63	1015 SMITH.61	1015 SMITH.61
N	1193 KLEINPOPP.64		1022 SMITH.62	1025 KINGSTON.61	1025 KINGSTON.61
NE	0100 SCHULZ.63	0517 SCHULZ.63	1026 SARAPH.61	1030 TENKIN.61	1030 TENKIN.61
	0519 FLEMING.63	0520 SCHULZ.64	1033 LIPPWANN.61	1051 TENKIN.62	1051 TENKIN.62
	1347 KUTVATT.65	1004 HUGHES.33	1076 SOMERVILLE.63	1083 MAGNIN.64	1083 MAGNIN.64
NE	0652 ARNOT.31	0300 SCHULZ.63	1084 ROSENBERG.63	1087 VAINSHTEIN.63	1087 VAINSHTEIN.63
	0520 SCHULZ.44	1004 HUGHES.33	1092 SLOAN.64	1416 LANE.64	1416 LANE.64
	1347 KUTVATT.65		1097 SLOAN.64	1406 HAN.62	1406 HAN.62
AR	0620 HUGHES.32	0600 BALLARD.31	1097 SLOAN.64	1510 TIETZ.63	1510 TIETZ.63
	0652 ARNOT.31	1347 KUTVATT.65	1097 SLOAN.64	1520 TAYLOR.65	1520 TAYLOR.65
N	0610 FRANKEN.50		1097 SLOAN.64	1521 DAMBURG.63	1521 DAMBURG.63
NR	0632 ARNOT.31	0520 SCHULZ.64	1097 SLOAN.64	1523 DAMBURG.63	1523 DAMBURG.63
	1347 KUTVATT.65		1097 SLOAN.64	1524 ARMSTEAD.65	1524 ARMSTEAD.65
XE	0652 ARNOT.31	0520 SCHULZ.64	1097 SLOAN.64	1703 BAKER.65	1703 BAKER.65
	1347 KUTVATT.65		1097 SLOAN.64	1707 KANE.64	1707 KANE.64
NE	1347 KUTVATT.65		1097 SLOAN.64	1773 FLORE.65	1773 FLORE.65
NE	0652 ARNOT.31	1000 KUTVATT.64	1097 SLOAN.64	1776 GAILLITZ.65	1776 GAILLITZ.65
	1071 KUTVATT.64		1097 SLOAN.64		
NE	0652 ARNOT.31	0300 SCHULZ.63	1097 SLOAN.64		
	1004 SCHULZ.64		1097 SLOAN.64		
CO	0652 ARNOT.31		1097 SLOAN.64		
CO	0652 ARNOT.31		1097 SLOAN.64		
NO	1071 KUTVATT.64		1097 SLOAN.64		
NO	1071 KUTVATT.64		1097 SLOAN.64		
TOTAL ELASTIC SCATTERING			TOTAL ELASTIC SCATTERING		
THEORETICAL			THEORETICAL		
NORMALIZED			NORMALIZED		
N	0424 COHEN.61.63	0425 COHEN.61.63	N	0424 COHEN.61.63	0425 COHEN.61.63
NE	0004 BURKE.63	0127 BURKE.63	NE	0004 BURKE.63	0127 BURKE.63
NE	0003 BURKE.63	0127 BURKE.63	NE	0003 BURKE.63	0127 BURKE.63
NE	0101 BURKE.63	0127 BURKE.63	NE	0101 BURKE.63	0127 BURKE.63
NE	0104 BURKE.63	0127 BURKE.63	NE	0104 BURKE.63	0127 BURKE.63
NE	0230 BURKE.63	0127 BURKE.63	NE	0230 BURKE.63	0127 BURKE.63
NE	0270 BURKE.63	0127 BURKE.63	NE	0270 BURKE.63	0127 BURKE.63
NE	0310 BURKE.63	0127 BURKE.63	NE	0310 BURKE.63	0127 BURKE.63
NE	0350 BURKE.63	0127 BURKE.63	NE	0350 BURKE.63	0127 BURKE.63
NE	0390 BURKE.63	0127 BURKE.63	NE	0390 BURKE.63	0127 BURKE.63
NE	0430 BURKE.63	0127 BURKE.63	NE	0430 BURKE.63	0127 BURKE.63
NE	0470 BURKE.63	0127 BURKE.63	NE	0470 BURKE.63	0127 BURKE.63
NE	0510 BURKE.63	0127 BURKE.63	NE	0510 BURKE.63	0127 BURKE.63
NE	0550 BURKE.63	0127 BURKE.63	NE	0550 BURKE.63	0127 BURKE.63
NE	0590 BURKE.63	0127 BURKE.63	NE	0590 BURKE.63	0127 BURKE.63
NE	0630 BURKE.63	0127 BURKE.63	NE	0630 BURKE.63	0127 BURKE.63
NE	0670 BURKE.63	0127 BURKE.63	NE	0670 BURKE.63	0127 BURKE.63
NE	0710 BURKE.63	0127 BURKE.63	NE	0710 BURKE.63	0127 BURKE.63
NE	0750 BURKE.63	0127 BURKE.63	NE	0750 BURKE.63	0127 BURKE.63
NE	0790 BURKE.63	0127 BURKE.63	NE	0790 BURKE.63	0127 BURKE.63
NE	0830 BURKE.63	0127 BURKE.63	NE	0830 BURKE.63	0127 BURKE.63
NE	0870 BURKE.63	0127 BURKE.63	NE	0870 BURKE.63	0127 BURKE.63
NE	0910 BURKE.63	0127 BURKE.63	NE	0910 BURKE.63	0127 BURKE.63
NE	0950 BURKE.63	0127 BURKE.63	NE	0950 BURKE.63	0127 BURKE.63
NE	0990 BURKE.63	0127 BURKE.63	NE	0990 BURKE.63	0127 BURKE.63
NE	1030 BURKE.63	0127 BURKE.63	NE	1030 BURKE.63	0127 BURKE.63
NE	1070 BURKE.63	0127 BURKE.63	NE	1070 BURKE.63	0127 BURKE.63
NE	1110 BURKE.63	0127 BURKE.63	NE	1110 BURKE.63	0127 BURKE.63
NE	1150 BURKE.63	0127 BURKE.63	NE	1150 BURKE.63	0127 BURKE.63
NE	1190 BURKE.63	0127 BURKE.63	NE	1190 BURKE.63	0127 BURKE.63
NE	1230 BURKE.63	0127 BURKE.63	NE	1230 BURKE.63	0127 BURKE.63
NE	1270 BURKE.63	0127 BURKE.63	NE	1270 BURKE.63	0127 BURKE.63
NE	1310 BURKE.63	0127 BURKE.63	NE	1310 BURKE.63	0127 BURKE.63
NE	1350 BURKE.63	0127 BURKE.63	NE	1350 BURKE.63	0127 BURKE.63
NE	1390 BURKE.63	0127 BURKE.63	NE	1390 BURKE.63	0127 BURKE.63
NE	1430 BURKE.63	0127 BURKE.63	NE	1430 BURKE.63	0127 BURKE.63
NE	1470 BURKE.63	0127 BURKE.63	NE	1470 BURKE.63	0127 BURKE.63
NE	1510 BURKE.63	0127 BURKE.63	NE	1510 BURKE.63	0127 BURKE.63
NE	1550 BURKE.63	0127 BURKE.63	NE	1550 BURKE.63	0127 BURKE.63
NE	1590 BURKE.63	0127 BURKE.63	NE	1590 BURKE.63	0127 BURKE.63
NE	1630 BURKE.63	0127 BURKE.63	NE	1630 BURKE.63	0127 BURKE.63
NE	1670 BURKE.63	0127 BURKE.63	NE	1670 BURKE.63	0127 BURKE.63
NE	1710 BURKE.63	0127 BURKE.63	NE	1710 BURKE.63	0127 BURKE.63
NE	1750 BURKE.63	0127 BURKE.63	NE	1750 BURKE.63	0127 BURKE.63
NE	1790 BURKE.63	0127 BURKE.63	NE	1790 BURKE.63	0127 BURKE.63
NE	1830 BURKE.63	0127 BURKE.63	NE	1830 BURKE.63	0127 BURKE.63
NE	1870 BURKE.63	0127 BURKE.63	NE	1870 BURKE.63	0127 BURKE.63
NE	1910 BURKE.63	0127 BURKE.63	NE	1910 BURKE.63	0127 BURKE.63
NE	1950 BURKE.63	0127 BURKE.63	NE	1950 BURKE.63	0127 BURKE.63
NE	1990 BURKE.63	0127 BURKE.63	NE	1990 BURKE.63	0127 BURKE.63
NE	2030 BURKE.63	0127 BURKE.63	NE	2030 BURKE.63	0127 BURKE.63
NE	2070 BURKE.63	0127 BURKE.63	NE	2070 BURKE.63	0127 BURKE.63
NE	2110 BURKE.63	0127 BURKE.63	NE	2110 BURKE.63	0127 BURKE.63
NE	2150 BURKE.63	0127 BURKE.63	NE	2150 BURKE.63	0127 BURKE.63
NE	2190 BURKE.63	0127 BURKE.63	NE	2190 BURKE.63	0127 BURKE.63
NE	2230 BURKE.63	0127 BURKE.63	NE	2230 BURKE.63	0127 BURKE.63
NE	2270 BURKE.63	0127 BURKE.63	NE	2270 BURKE.63	0127 BURKE.63
NE	2310 BURKE.63	0127 BURKE.63	NE	2310 BURKE.63	0127 BURKE.63
NE	2350 BURKE.63	0127 BURKE.63	NE	2350 BURKE.63	0127 BURKE.63
NE	2390 BURKE.63	0127 BURKE.63	NE	2390 BURKE.63	0127 BURKE.63
NE	2430 BURKE.63	0127 BURKE.63	NE	2430 BURKE.63	0127 BURKE.63
NE	2470 BURKE.63	0127 BURKE.63	NE	2470 BURKE.63	0127 BURKE.63
NE	2510 BURKE.63	0127 BURKE.63	NE	2510 BURKE.63	0127 BURKE.63
NE	2550 BURKE.63	0127 BURKE.63	NE	2550 BURKE.63	0127 BURKE.63
NE	2590 BURKE.63	0127 BURKE.63	NE	2590 BURKE.63	0127 BURKE.63
NE	2630 BURKE.63	0127 BURKE.63	NE	2630 BURKE.63	0127 BURKE.63
NE	2670 BURKE.63	0127 BURKE.63	NE	2670 BURKE.63	0127 BURKE.63
NE	2710 BURKE.63	0127 BURKE.63	NE	2710 BURKE.63	0127 BURKE.63
NE	2750 BURKE.63	0127 BURKE.63	NE	2750 BURKE.63	0127 BURKE.63
NE	2790 BURKE.63	0127 BURKE.63	NE	2790 BURKE.63	0127 BURKE.63
NE	2830 BURKE.63	0127 BURKE.63	NE	2830 BURKE.63	0127 BURKE.63
NE	2870 BURKE.63	0127 BURKE.63	NE	2870 BURKE.63	0127 BURKE.63
NE	2910 BURKE.63	0127 BURKE.63	NE	2910 BURKE.63	0127 BURKE.63
NE	2950 BURKE.63	0127 BURKE.63	NE	2950 BURKE.63	0127 BURKE.63
NE	2990 BURKE.63	0127 BURKE.63	NE	2990 BURKE.63	0127 BURKE.63
NE	3030 BURKE.63	0127 BURKE.63	NE	3030 BURKE.63	0127 BURKE.63
NE	3070 BURKE.63	0127 BURKE.63	NE	3070 BURKE.63	0127 BURKE.63
NE	3110 BURKE.63	0127 BURKE.63	NE	3110 BURKE.63	0127 BURKE.63
NE	3150 BURKE.63	0127 BURKE.63	NE	3150 BURKE.63	0127 BURKE.63
NE	3190 BURKE.63	0127 BURKE.63	NE	3190 BURKE.63	0127 BURKE.63
NE	3230 BURKE.63	0127 BURKE.63	NE	3230 BURKE.63	0127 BURKE.63
NE	3270 BURKE.63	0127 BURKE.63	NE	3270 BURKE.63	0127 BURKE.63
NE	3310 BURKE.63	0127 BURKE.63	NE	3310 BURKE.63	0127 BURKE.63
NE	3350 BURKE.63	0127 BURKE.63	NE	3350 BURKE.63	0127 BURKE.63
NE	3390 BURKE.63	0127 BURKE.63	NE	3390 BURKE.63	0127 BURKE.63
NE	3430 BURKE.63	0127 BURKE.63	NE	3430 BURKE.63	0127 BURKE.63
NE	3470 BURKE.63	0127 BURKE.63	NE	3470 BURKE.63	0127 BURKE.63
NE	3510 BURKE.63	0127 BURKE.63	NE	3510 BURKE.63	0127 BURKE.63
NE	3550 BURKE.63	0127 BURKE.63	NE	3550 BURKE.63	0127 BURKE.63
NE	3590 BURKE.63	0127 BURKE.63	NE	3590 BURKE.63	0127 BURKE.63
NE	3630 BURKE.63	0127 BURKE.63	NE	3630 BURKE.63	0127 BURKE.63
NE	3670 BURKE.63	0127 BURKE.63	NE	3670 BURKE.63	0127 BURKE.63
NE	3710 BURKE.63	0127 BURKE.63	NE	3710 BURKE.63	0127 BURKE.63
NE	3750 BURKE.63	0127 BURKE.63	NE	3750 BURKE.63	0127 BURKE.63
NE	3790 BURKE.63	0127 BURKE.63	NE	3790 BURKE.63	0127 BURKE.63
NE	3830 BURKE.63	0127 BURKE.63	NE	3830 BURKE.63	0127 BURKE.63
NE	3870 BURKE.63	0127 BURKE.63	NE	3870 BURKE.63	0127 BURKE.63
NE	3910 BURKE.63	0127 BURKE.63	NE	3910 BURKE.63	0127 BURKE.63
NE	3950 BURKE.63	0127 BURKE.63	NE	3950 BURKE.63	0127 BURKE.63
NE	3990 BURKE.63	0127 BURKE.63	NE	3990 BURKE.63	0127 BURKE.63
NE	4030 BURKE.63	0127 BURKE.63	NE	4030 BURKE.63	0127 BURKE.63
NE	4070 BURKE.63	0127 BURKE.63	NE	4070 BURKE.63	0127 BURKE.63
NE	4110 BURKE.63	0127 BURKE.63	NE	4110 BURKE.63	0127 BURKE.63
NE	4150 BURKE.63	0127 BURKE.63	NE	4150 BURKE.63	0127 BURKE.63
NE	4190 BURKE.63	0127 BURKE.63	NE	4190 BURKE.63	0127 BURKE.63
NE	4230 BURKE.63	0127 BURKE.63	NE	4230 BURKE.63	0127 BURKE.63
NE	4270 BURKE.63	0127 BURKE.63	NE	4270 BURKE.63	0127 BURKE.63
NE	4310 BURKE.63	0127 BURKE.63	NE	4310 BURKE.63	0127 BURKE.63
NE	4350 BURKE.63	0127 BURKE.63	NE	4350 BURKE.63	0127 BURKE.63
NE	4390 BURKE.63	0127 BURKE.63	NE	4390 BURKE.63	0127 BURKE.63
NE	4430 BURKE.63	0127 BURKE.63	NE	4430 BURKE.63	0127 BURKE.63
NE	4470 BURKE.63	0127 BURKE.63	NE	4470 BURKE.63	0127 BURKE.63
NE	4510 BURKE.63	0127 BURKE.63	NE	4510 BURKE.63	0127 BURKE.63
NE	4550 BURKE.63	0127 BURKE.63	NE	4550 BURKE.63	0127 BURKE.63
NE	4590 BURKE.63	0127 BURKE.63	NE	4590 BURKE.63	0127 BURKE.63
NE	4630 BURKE.63	0127 BURKE.63	NE	4630 BURKE.63	0127 BURKE.63
NE	4670 BURKE.63	0127 BURKE.63	NE	46	

TOTAL ELASTIC SCATTERING		THEORETICAL	DIFFERENTIAL ELASTIC SCATTERING EXPERIMENTAL	
NORMALIZED			NORMALIZED	
D	0487 HAMMERLIN, 57 0812 ROBINSON, 61 0928 MITRA, 60 1545 MYERS-COLSON, 65 1832 SEATON, 52	0597 BYATT, 59 0821 BAUER, 64 1057 COOPER, 62 1899 LEHMAN, 64	M	1031 GILBODY, 61
F	0572 MOCHNI, 53	1857 COOPER, 62	ME	0165 HUGHES, 32 0637 LANGMUIR, 28 1277 HUGHES, 36
NE	0060 OMALLEY, 63 0185 MOLTSHAWK, 28 0409 TIEZ, 50 0471 MOISEWITSCH, 61 0821 BAUER, 64 1059 BIERMAN, 64	0184 ALLIS, 31 0267 BULLARD, 30 0449 KIVEL, 59 0495 MOISEWITSCH, 63 0944 FREMKEL, 62	ME	0187 BERNAN, 49 0637 LANGMUIR, 28
NA	0106 ALLIS, 31 0519 DAMMURG, 60 0950 GARRETT, 65 1052 SALMONA, 61 1491 KARULE, 65 1520 SALMONA, 63 1542 KARULE, 65 1864 KARULE, 65 2092 PETERKOP, 65	0499 SALMONA, 59 0812 ROBINSON, 61 1023 SALMONA, 61 1409 KARULE, 65 1498 GARRETT, 65 1523 GARRETT, 64 1587 SALMONA, 65 1835 KARULE, 65	ME	0021 TATE, 32 1535 KESSLER, 64
MA	1 0422 SEATON, 57		M2	0637 LANGMUIR, 28
CL	0267 BULLARD, 30	1857 COOPER, 62	M2	0637 LANGMUIR, 28
AR	0060 OMALLEY, 63 0106 ALLIS, 31 0307 BARRIERE, 51 0450 KIVEL, 59 0495 MOISEWITSCH, 63 0810 MARTYENKO, 63 0873 KARLE, 64 1579 BRACKETT, 63	0099 MOLTSHAWK, 29 1185 MOLTSHAWK, 28 0449 KIVEL, 59 0471 MOISEWITSCH, 61 0821 BAUER, 64 1059 BIERMAN, 64 1850 LEHMAN, 64	C 0	0374 LASSETTRE, 53
K	0810 DAMMURG, 60 1405 KARULE, 65 1523 GARRETT, 64 1864 KARULE, 65 2092 PETERKOP, 65	0959 GARRETT, 64 1491 KARULE, 65 1542 KARULE, 65 1865 KARULE, 65	C M4	0190 EDWISTEN, 49
CA	0557 KAMENETSKII, 60	1448 BELT, 64	C2M6	0190 EDWISTEN, 49
ZN	0106 ALLIS, 31		RELATIVE	
KR	0060 OMALLEY, 63 0449 KIVEL, 59 0495 MOISEWITSCH, 63 0821 BAUER, 64	0104 MOLTSHAWK, 30 0471 MOISEWITSCH, 61 0810 MARTYENKO, 63	M	0230 HARNWELL, 29 1593 KLEINPOPPEN, 65
KE	0060 OMALLEY, 63 0810 MARTYENKO, 63	0449 KIVEL, 59	ME	0003 DYMOND, 27 0053 BULLARD, 31 0158 HARNWELL, 29 0253 DYMOND, 29 1470 EMMHARDT, 65
CS	0036 GARRETT, 63 0810 DAMMURG, 60 1409 KARULE, 65 1523 GARRETT, 64 1864 KARULE, 65 2092 PETERKOP, 65	0359 STONE, 63 1303 CROWN, 65 1491 KARULE, 65 1542 KARULE, 65 1865 KARULE, 65 2092 PETERKOP, 65	ME	0052 ARNOT, 31 0059 MOHR, 32 0158 HARNWELL, 29
MG	0557 KAMENETSKII, 60 0592 GAJEWSKI, 58	0502 TIEZ, 50	AR	0011 MCHILLEN, 30 0022 WEBB, 35 0052 ARNOT, 31 0129 RAMSAUER, 31
TL	0106 ALLIS, 31		K	0833 MCHILLEN, 34
U	0572 MOCHNI, 53 0875 KARLE, 64	0592 GAJEWSKI, 58	ZN	2064 CHILDS, 33
M2	0034 FISK, 36 0251 HASSEY, 30 0421 CANTER, 58 0434 CARSON, 54 1816 OKSYUK, 66	0054 HASSEY, 32 0411 NAGAHARA, 54 0428 HASSEY, 56 1452 TAKAYANAGI, 65	KR	0022 WEBB, 35
O2	0034 FISK, 36 1816 OKSYUK, 66	1666 GELTMAN, 66	CO	0062 CHILDS, 33
M2	0034 FISK, 36 1452 TAKAYANAGI, 65 1852 CHEN, 66	0495 CHEN, 64 1816 OKSYUK, 66	KE	0052 ARNOT, 31
M20	0385 ALTSHULER, 57		AU	1111 REICHERT, 63
M3	0385 ALTSHULER, 57		MG	0050 ARNOT, 31 0144 ARNOT, 32 0191 ARNOT, 29 0245 ARNOT, 33 1002 JORDAN, 34 1427 DEICHSFL, 65 1475 ROSE, 30
C M4	0070 BUCKINGHAM, 41		M2	0011 MCHILLEN, 30 0031 WEBB, 35 0053 BULLARD, 31 0124 RAMSAUER, 31 0230 HARNWELL, 29
			M2	0052 ARNOT, 31 0059 MOHR, 32 0158 HARNWELL, 29
			C2M2	1286 CHILDS, 34
			C 02	0059 MOHR, 32
			C 0	0052 ARNOT, 31
			M2	0365 ARNOT, 34
			C M4	0052 ARNOT, 31 0059 MOHR, 32
			12	0065 ARNOT, 34
			M25	0059 MOHR, 32
			P M3	0059 MOHR, 32
			C CL4	0065 ARNOT, 34
			C2M4	1286 CHILDS, 34
			C2M6	1286 CHILDS, 34

## DIFFERENTIAL ELASTIC SCATTERING EXPERIMENTAL

## RELATIVE

C F4 1287 MILL.36

## DIFFERENTIAL ELASTIC SCATTERING THEORETICAL

## NORMALIZED

M	0025 MORSE.33	0028 CORINALEST.63
	0083 BURKE.63	0127 MUANG.49
	0151 BUNKE.62	0234 MASSEY.34
	0244 GELTMAN.60	0301 OSMALLEY.42
	0410 BRANSDEN.53	0490 SCHWARTZ.41
	0511 BOROWITZ.54	0544 MOISEWITSCH.59
	0567 WU.60	0855 MCEACHMAN.60
	0879 MALIK.61	0899 JOHN.62
	0903 PU.63	0918 BURKE.62
	0935 OCHKUR.58	0967 GREENBERG.57
	1022 SMITH.62	1025 KINGSTON.61
	1030 TEMKIN.61	1130 KLEIN.55
	1461 SCOTT.65	1524 TAYLOR.65

M • 0935 OCHKUR.58

ME	0025 MORSE.33	0136 MOTT.33
	0221 FEENBERG.32	0258 MOLCS.61
	0383 SACHL.59	0462 MUCINAGA.60
	0544 MOISEWITSCH.59	0590 KOLOS.61
	0976 LABAHN.64	1048 MUKHERJEE.61
	1056 INOKUTI.61	1283 KAR.37
	1308 GHOSH.35	1407 KHAKE.55
	1408 KHAKE.65	1493 KHAKE.64
	1817 ORIENT.66	

ME • 0514 BHATTA, ARYYA.61

LI 1865 KARULE.65

BE 0884 PILYANKEVICH.60

BE 2 0884 PILYANKEVICH.60

B 0884 PILYANKEVICH.60

C 0884 PILYANKEVICH.60

C 2 0884 PILYANKEVICH.60

C 4 0884 PILYANKEVICH.60

N 1579 BRACKETT.63

O 0409 TIETZ.59 1579 BRACKETT.63

F 0572 MOERNI.53 1287 MILL.36

NA 1865 KARULE.65

NA 1 0719 SEATON.58

S 1176 TIETZ.60

CL 0745 TIETZ.60

AR 0409 TIETZ.59 0821 BAUER.64

1579 BRACKETT.63 1469 KARULE.65

1864 KARULE.65 1865 KARULE.65

BR 1152 ARNOT.34

KR 0156 ARNOT.34 1199 MUKHERJEE.61

CS 1865 KARULE.65

AU 1646 SCHONFELDER.66

HG 0109 BUNYAN.63 1424 BUYAN.65

1046 SCHONFELDER.66

BI 1046 SCHONFELDER.66

U 0572 MOERNI.53

M2 0251 MASSEY.30 1311 ROSCOE.38

1408 KHAKE.65

BR2 1152 ARNOT.34 1191 SHAN.40

## RELATIVE

M 0068 MASSEY.34

## DIFFERENTIAL ELASTIC SCATTERING THEORETICAL

## RELATIVE

ME	0051 MASSEY.31	0054 MASSEY.32
	0068 MASSEY.34	0302 FANO.61
	0639 MORSE.32	

ME 1 0440 BRANSDEN.53

O 0048 MOTT.30

F 1287 MILL.36

CL 1287 MILL.36

AR 0655 HENNEBERG.33

KR 0113 VOSS.33 0655 HENNEBERG.33

1294 HUGHES.35

HG 0653 HENNEBERG.32 0655 HENNEBERG.33

M2 0054 MASSEY.32 0194 MASSEY.32

0463 GRYZINSKI.64

N2 0138 MASSEY.33 0194 MASSEY.32

C2M2 0726 HUGHES.33

C M4 0070 BUCKINGHAM.61 0726 HUGHES.33

C CL4 1287 MILL.36

C2M4 0726 HUGHES.33

C F4 1287 MILL.36

## ELECTRONIC EXCITATION EXPERIMENTAL

## NORMALIZED

M	0321 FITE.58	0326 FITE.59
	0327 LICHTEN.59	0332 STEBBINGS.60
	0936 SCHULTZ.60	1486 SMITH.65

ME 0056 LEES.32 0123 DORRESTEIN.42

0124 DORRESTEIN.42 0125 WOUDEMBOER.41

0192 FRANCIS.47 0318 SCHULTZ.57

0336 CORRIGAN.58 0338 STEWART.59

0373 LASSETTRE.53 0379 SILVERMAN.57

0464 FRISH.58 0477 YAKHONTOVA.60

0495 LIN.62 0554 HUGHES.63

0600 PHELPS.58 0637 LANGMUIR.28

0742 ST JOHN.60 0787 HUGHES.63

0799 SILVERMAN.64 0800 LASSETTRE.64

0871 FLEMING.63 0886 GABRIEL.60

1049 ST JOHN.64 1088 FLEMING.64

1265 JONES.48 1323 YAKHONTOVA.59

1455 MILLER.64 1520 MOLT.65

1583 ZAPESOCHNYI.65 1677 MOLT.66

1760 LASHMORE-DAVIES.65 1892 MOLT.65

1895 ZAPESOCHNYI.65

ME • 0759 RORBER.63

ME 1 1803 DANCE.66

LI 0773 FELDMAN.63 1072 HUGHES.64

ME 0122 MILATZ.40 0123 DORRESTEIN.42

0124 DORRESTEIN.42 0187 BERNMAN.49

0205 MADEISHI.63 0288 HERRMANN.36

0637 LANGMUIR.28 1094 TIEN.64

1330 MADEISHI.65 1571 FRISH.63

1584 REVALD.65

NA 0141 LOVERIDGE.31 0290 CHRISTOPH.35

0414 VOLKOVA.61 1517 ZAPESOCHNYI.65

1683 ZAPESOCHNYI.65

AR 0187 BERNMAN.49 0288 HERRMANN.36

0637 LANGMUIR.28 0755 VOLKOVA.59

1823 ZAPESOCHNYI.66

K 0141 LOVERIDGE.31 0275 FABRIANT.30

0344 VOLKOVA.59 0505 VOLKOVA.62

0749 VOLKOVA.59 0773 FELDMAN.63

1517 ZAPESOCHNYI.65 1533 VOLKOVA.63

1680 ZAPESOCHNYI.65

FE 0929 BELOUSOVA.61

KR 0474 VOLKOVA.60 1823 ZAPESOCHNYI.66

RB 0773 FELDMAN.63 1517 ZAPESOCHNYI.65

1701 ZAPESOCHNYI.66





ELECTRONIC EXCITATION		THEORETICAL	ELECTRONIC EXCITATION		THEORETICAL
NORMALIZED			NORMALIZED		
NE	1876 VELDRE.65 1866 VELDRE.65	1881 BOIKOVA.65 1887 VELDRE.65	P 11	0792 VARSAVSKY.61	
NE	2 0404 SEATON.53	0484 SEATON.55	P 12	0792 VARSAVSKY.61	
NE	3 0404 SEATON.53	0484 SEATON.55	S 1	0404 SEATON.53 0484 SEATON.55	0442 CZYZAK.64
NE	4 0404 SEATON.53	0484 SEATON.55	S 2	0442 CZYZAK.64	1696 BELY.66
NE	5 0792 VARSAVSKY.61		S 4	0792 VARSAVSKY.61	
NE	6 0792 VARSAVSKY.61	1050 BELY.66	S 9	0792 VARSAVSKY.61	
NE	7 0792 VARSAVSKY.61		S 10	0792 VARSAVSKY.61	
NA	0155 SEATON.62 0452 GRYZINSKI.59 1014 GRYZINSKI.65 1072 HUGHES.64 1251 BARNES.65 1419 LANE.64 1476 VAINSHTEIN.64 1546 VAINSHTEIN.61 1793 BIELSKI.65	0431 SEATON.55 0497 SOMERVILLE.61 1823 SALMONA.61 1119 OCHKUR.63 1319 VELDRE.56 1469 KARULE.65 1520 SALMONA.63 1587 SALMONA.65 1813 VAINSHTEIN.64	S 11	0792 VARSAVSKY.61	
NA	0568 LANE.64		CL 3	0442 CZYZAK.64	1696 BELY
NA	3 0404 SEATON.53	0484 SEATON.55	CL 10	0792 VARSAVSKY.61	
NA	4 0404 SEATON.53 0792 VARSAVSKY.61	0484 SEATON.55	CL 11	0792 VARSAVSKY.61	
NA	5 0792 VARSAVSKY.61		CL 12	0792 VARSAVSKY.61	
NA	6 0792 VARSAVSKY.61		AR	1867 VELDRE.65	
NA	7 0792 VARSAVSKY.61		AR 4	0442 CZYZAK.64	1696 BELY.66
NA	8 0792 VARSAVSKY.61		AR 7	0792 VARSAVSKY.61	
NA	9 0775 BELY.63 1122 VAN REDEMORTER.60	1053 VAN REDEMORTER.61	AR 11	0792 VARSAVSKY.61	
NA	4 0404 SEATON.53 0792 VARSAVSKY.61	0484 SEATON.55	AR 12	0792 VARSAVSKY.61	
NA	5 0792 VARSAVSKY.61		AR 13	0792 VARSAVSKY.61	
NA	6 0792 VARSAVSKY.61		K	1072 HUGHES.64 1813 VAINSHTEIN.64	1469 KARULE.65
NA	7 0792 VARSAVSKY.61		K 7	0792 VARSAVSKY.61	
NA	8 0792 VARSAVSKY.61		K 8	0792 VARSAVSKY.61	
NA	9 0775 BELY.63	0792 VARSAVSKY.61	K 12	0792 VARSAVSKY.61	
NA	10 0792 VARSAVSKY.61		K 13	0792 VARSAVSKY.61	
NA	11 0792 VARSAVSKY.61		CA	1448 BELY.64	
NA	12 0792 VARSAVSKY.61		CA 1	0720 VAN REDEMORTER.60 1122 VAN REDEMORTER.60	1054 VAN REDEMORTER.61 1876 PETRINI.65
NA	13 0792 VARSAVSKY.61		CA 7	0792 VARSAVSKY.61	
NA	14 0792 VARSAVSKY.61		CA 8	0792 VARSAVSKY.61	
NA	15 0792 VARSAVSKY.61		CA 9	0792 VARSAVSKY.61	
NA	16 0792 VARSAVSKY.61		CA 14	0792 VARSAVSKY.61	
NA	17 0792 VARSAVSKY.61		SC 4	0792 VARSAVSKY.61	
NA	18 0792 VARSAVSKY.61		SC 7	0792 VARSAVSKY.61	
NA	19 0792 VARSAVSKY.61		SC 8	0792 VARSAVSKY.61	
NA	20 0792 VARSAVSKY.61		SC 9	0792 VARSAVSKY.61	
NA	21 0792 VARSAVSKY.61		SC 10	0792 VARSAVSKY.61	
NA	22 0792 VARSAVSKY.61		TI 4	0792 VARSAVSKY.61	
NA	23 0792 VARSAVSKY.61		TI 7	0792 VARSAVSKY.61	
NA	24 0792 VARSAVSKY.61		TI 8	0792 VARSAVSKY.61	
NA	25 0792 VARSAVSKY.61		TI 9	0792 VARSAVSKY.61	
NA	26 0792 VARSAVSKY.61		TI 10	0792 VARSAVSKY.61	
NA	27 0792 VARSAVSKY.61		TI 11	0792 VARSAVSKY.61	
NA	28 0792 VARSAVSKY.61		V 4	0792 VARSAVSKY.61	
NA	29 0792 VARSAVSKY.61		V 7	0792 VARSAVSKY.61	
NA	30 0792 VARSAVSKY.61		V 8	0792 VARSAVSKY.61	
NA	31 0792 VARSAVSKY.61		V 9	0792 VARSAVSKY.61	
NA	32 0792 VARSAVSKY.61		V 10	0792 VARSAVSKY.61	
NA	33 0792 VARSAVSKY.61		V 11	0792 VARSAVSKY.61	
NA	34 0792 VARSAVSKY.61		V 12	0792 VARSAVSKY.61	
NA	35 0792 VARSAVSKY.61		CR	7 0792 VARSAVSKY.61	

ELECTRONIC EXCITATION	THEORETICAL
NORMALIZED	
CR 8 0792 VARSAVSKY,61	
CR 9 0792 VARSAVSKY,61	
CR 10 0792 VARSAVSKY,61	
CR 11 0792 VARSAVSKY,61	
CR 12 0792 VARSAVSKY,61	
CR 13 0792 VARSAVSKY,61	
MN 8 0792 VARSAVSKY,61	
MN 9 0792 VARSAVSKY,61	
MN 10 0792 VARSAVSKY,61	
MN 11 0792 VARSAVSKY,61	
MN 12 0792 VARSAVSKY,61	
MN 13 0792 VARSAVSKY,61	
MN 14 0792 VARSAVSKY,61	
FE 1 0909 SEATON,55	
FE 7 1943 CZYZAK,66	
FE 9 0792 VARSAVSKY,61	
FE 10 0792 VARSAVSKY,61	
FE 11 0792 VARSAVSKY,61	
FE 12 0792 VARSAVSKY,61	
FE 13 0437 BLAMA,62 0547 BELY,62 0923 WOOLLEY,48	0455 HILL,51 0792 VARSAVSKY,61
FE 14 0792 VARSAVSKY,61	
FE 15 0775 BELY,63 1932 KRUEGER,65	0792 VARSAVSKY,61
CO 10 0792 VARSAVSKY,61	
CO 11 0792 VARSAVSKY,61	
CO 12 0792 VARSAVSKY,61	
CO 13 0792 VARSAVSKY,61	
CO 14 0792 VARSAVSKY,61	
CO 15 0792 VARSAVSKY,61	
CO 16 0792 VARSAVSKY,61	
NI 11 0792 VARSAVSKY,61	
NI 12 0792 VARSAVSKY,61	
NI 13 0792 VARSAVSKY,61	
NI 14 0792 VARSAVSKY,61	
NI 15 0792 VARSAVSKY,61	
NI 16 0792 VARSAVSKY,61	
NI 17 0792 VARSAVSKY,61	
RS 1072 HUGHES,64	1813 VAINSHTEIN,64
CS 1063 HANSEN,64 1456 WITTING,65 1813 VAINSHTEIN,64	1872 HUGHES,64 1469 KARULE,65
CS 1272 SMELDON,65	
WA 1 1876 PETRINI,65	
MO 0202 YAVORSKY,46 0452 GRYZINSKI,59	0272 YAVORSKY,48 1416 LANE,64
MO 1103 YAVORSKY,47	
M2 0845 ROSCOE,41	0194 MASSEY,32
M2 1 1855 PEEK,64	1342 CALLAWAY,65
O2 1557 BAUER,65	1558 BAUER,65
M2 1557 BAUER,65	1558 BAUER,65

ELECTRONIC EXCITATION	THEORETICAL
NORMALIZED	
NR 1 1557 BAUER,65	1558 BAUER,65
M20 0294 NIIRA,49	
N 0 1557 BAUER,65	1558 BAUER,65
RELATIVE	
ME 0284 MASSEY,33 0639 MORSE,32	0386 BARANGER,57 1297 JONES,36
N 0484 SEATON,55	
O 1 0876 ALLER,50	
O 2 0876 ALLER,50	
NE 0068 MASSEY,34	
AR 0068 MASSEY,34	
CA 1 0963 JEFFERIES,54	
MW 0019 PENNEY,32	
M2 0987 COOLIDGE,44	
O2 0987 COOLIDGE,44	

ELECTRON DETACHMENT	EXPERIMENTAL
NORMALIZED	
M - 1880 TISONE,66	

ELECTRON DETACHMENT	THEORETICAL
NORMALIZED	
M - 0415 GELTMAN,60 0576 RUDDE,64 1483 TIETZ,63	0478 MCDOWELL,53 1125 GELTMAN,60 1764 SMIRNOV,66
O - 0365 WATANABE,50	
CL - 1300 MASSEY,36	1463 ROBINSON,65

DE-EXCITATION	EXPERIMENTAL
NORMALIZED	
ME 0569 PHELPS,55	
CS 0279 HOWLER,32	
RELATIVE	
MO 0102 LATYSCHIEFF,30	

DE-EXCITATION	THEORETICAL
NORMALIZED	
ME 0426 HARRIOTT,57	1658 HARRIOTT,66
O 0366 YAMAMUCHI,58	
CS 1456 WITTING,65	
MO 0202 YAVORSKY,46	



IONIZATION		EXPERIMENTAL		IONIZATION		EXPERIMENTAL	
NORMALIZED				NORMALIZED			
M	0320 FITE,50 0978 ROTHE,62	0491 BOYD,60 1104 BOKSENBURG,61		CS	1104 MCFARLAND,65 1875 METL,66	1217 BRINK,64 1972 ZAPESCHNYI,66	
ME	0002 COMPTON,25 0225 SMITH,30 0340 LAMPE,57 0626 ASUNDI,63 0743 ASUNDI,63 0799 SILVERMAN,64 0974 HARRISON,56 1105 ENGLANDER-GOLDEN,64 1329 FOX,61 1706 SCHRAM,66 1858 ADAMCZYK,66 1895 ZAPESCHNYI,65	0029 LISKA,34 0335 BOYD,58 0373 LASSETTYRE,53 0674 COMPTON,10 0787 HUGHES,63 0942 ST. JOHN,64 0995 GOODRICH,37 1281 SCHRAM,65 1459 RAPP,65 1706 SCHRAM,66 1903 SCHRAM,66		BA	1502 MCFARLAND,65		
ME	0200 FITE,63			MB	0002 COMPTON,25 0021 TATE,32 0840 NOTTINGHAM,39 0224 SMITH,31 0303 RIEDE,54 1329 FOX,61	0004 JONES,27 0029 LISKA,34 0069 ARNOT,35 0228 BLEAKNEY,30 0974 HARRISON,56	
ME	1 0907 DOLDER,61			MB	1 0723 LATPOV,64		
LI	0773 FELDMAN,63	1104 MCFARLAND,65		MB	2 0723 LATPOV,64		
LI	1 1421 LINEBERGER,65			FL	1502 MCFARLAND,65		
N	0031 PETERSON,64	1268 SMITH,62		M2	0002 COMPTON,25 0041 NEWMALL,42 0320 FITE,58 0340 LAMPE,57 1105 ENGLANDER-GOLDEN,64 1281 SCHRAM,65 1748 SCHRAM,66 1863 SCHRAM,66	0018 TATE,32 0268 ENGELHARDT,63 0335 BOYD,58 0974 HARRISON,56 1106 BOKSENBURG,61 1459 RAPP,65 1858 ADAMCZYK,66	
N	1 0261 HARRISON,63			O2	0018 TATE,32 0334 STEWART,58 0377 SILVERMAN,57 0861 PRASAD,61 0946 GLICK,64 1105 ENGLANDER-GOLDEN,64 1281 SCHRAM,65 1459 RAPP,65 1838 NISHIMURA,66	0323 FITE,59 0340 LAMPE,57 0853 CRAIGGS,57 0938 ASUNDI,63 1075 SILVERMAN,64 1106 BOKSENBURG,61 1289 SCHULZ,62 1748 SCHRAM,66 1863 SCHRAM,66	
O	0323 FITE,59 0978 ROTHE,62	0602 JAMODA,62 1106 BOKSENBURG,61		M2	0002 COMPTON,25 0153 COOK,62 0340 LAMPE,57 0857 SILVERMAN,65 0992 EMERIDAN,61 1106 BOKSENBURG,61 1281 SCHRAM,65 1459 RAPP,65 1748 SCHRAM,66	0018 TATE,32 0333 STEWART,56 0831 PETERSON,64 0946 GLICK,64 1105 ENGLANDER-GOLDEN,64 1123 MAYAKAWA,64 1329 FOX,61 1504 MCCONKEY,65 1863 SCHRAM,66	
ME	0002 COMPTON,25 0225 SMITH,30 0626 ASUNDI,63 0831 PETERSON,64 1281 SCHRAM,65 1459 RAPP,65 1748 SCHRAM,66 1863 SCHRAM,66	0612 BLEAKNEY,30 0340 LAMPE,57 0743 ASUNDI,63 1105 ENGLANDER-GOLDEN,64 1329 FOX,61 1706 SCHRAM,66 1858 ADAMCZYK,66		M20	0340 LAMPE,57	1702 SCHUTTEN,66	
ME	1 0264 DOLDER,63	0723 LATPOV,64		N M3	0340 LAMPE,57		
NA	0088 FUNK,30 1217 BRINK,64	1104 MCFARLAND,65 1663 ZAPESCHNYI,65		N O	0018 TATE,32 0946 GLICK,64 1459 RAPP,65	0340 LAMPE,57 1105 ENGLANDER-GOLDEN,64	
NA	1 1568 HOOPER,66			C2H2	0018 TATE,32	0340 LAMPE,57	
AN	0002 COMPTON,25 0225 SMITH,30 0357 TOZER,60 0743 ASUNDI,63 0946 GLICK,64 1281 SCHRAM,65 1459 RAPP,65 1748 SCHRAM,66	0012 BLEAKNEY,30 0340 LAMPE,57 0626 ASUNDI,63 0831 PETERSON,64 1105 ENGLANDER-GOLDEN,64 1329 FOX,61 1706 SCHRAM,66 1863 SCHRAM,66		M20	1105 ENGLANDER-GOLDEN,64 1771 LATIMER,65	1459 RAPP,65	
AR	1 0723 LATPOV,64			C O2	0340 LAMPE,57 0938 ASUNDI,63 1105 ENGLANDER-GOLDEN,64 1700 NISHIMURA,66	0865 CRAIGGS,60 0948 NEWMALL,60 1459 RAPP,65	
AR	2 0723 LATPOV,64			C O	0018 TATE,32 0867 CRAIGGS,58 1105 ENGLANDER-GOLDEN,64 1459 RAPP,65	0340 LAMPE,57 0938 ASUNDI,63 1329 FOX,61	
K	0088 FUNK,30 1104 MCFARLAND,65	0773 FELDMAN,63 1217 BRINK,64		M CL	0002 COMPTON,25	0340 LAMPE,57	
K	1 1568 HOOPER,66			C M4	0340 LAMPE,57 0946 GLICK,64 1459 RAPP,65 1858 ADAMCZYK,66	0356 TOZER,58 1105 ENGLANDER-GOLDEN,64 1690 SCHRAM,66 1863 SCHRAM,66	
CA	1502 MCFARLAND,65			M25	0340 LAMPE,57		
ZN	1687 POTTIE,66			M D	1396 BRIGLIA,65		
KR	0340 LAMPE,57 0626 ASUNDI,63 1105 ENGLANDER-GOLDEN,64 1459 RAPP,65 1748 SCHRAM,66	0387 TOZER,60 0743 ASUNDI,63 1281 SCHRAM,65 1706 SCHRAM,66 1863 SCHRAM,66		O2	0248 ENGELHARDT,63 1281 SCHRAM,65 1863 SCHRAM,66	1105 ENGLANDER-GOLDEN,64 1459 RAPP,65	
KR	1 0723 LATPOV,64			C2H4	0340 LAMPE,57	1459 RAPP,65	
KR	2 0723 LATPOV,64			C2H6	0340 LAMPE,57	1690 SCHRAM,66	
RB	0773 FELDMAN,63 1217 BRINK,64	1104 MCFARLAND,65		S F6	0940 ASUNDI,64	1459 RAPP,65	
SR	1502 MCFARLAND,65			C M3CL	0340 LAMPE,57		
AB	1081 LYKHIMOV,63			C D4	1690 SCHRAM,66	1863 SCHRAM,66	
CD	1687 POTTIE,66			TEP	1687 POTTIE,66		
KE	0340 LAMPE,57 0626 ASUNDI,63 1105 ENGLANDER-GOLDEN,64 1459 RAPP,65 1748 SCHRAM,66	0387 TOZER,60 0743 ASUNDI,63 1281 SCHRAM,65 1706 SCHRAM,66 1863 SCHRAM,66					
KE	1 0723 LATPOV,64						
KE	2 0723 LATPOV,64						

IONIZATION		EXPERIMENTAL		IONIZATION		EXPERIMENTAL	
RELATIVE				RELATIVE			
M	1508 MCGOWAN,65			RB	0216 TATE,34	0283 FIQUET-FAYARD,63	
ME	0027 HUGHES,53	0035 BLEAKNEY,36		SR	0283 FIQUET-FAYARD,63		
	0066 MOHR,34	0280 FITE,63					
	0304 HANLE,52	0331 STANTON,60		AG	0566 BLAIS,60	1578 DE MARIA,65	
	0339 OTVOS,56	0353 FOX,58		CD	0313 MICKAM,54	1578 DE MARIA,65	
	0525 KRAUSS,59	0539 HAYAKAWA,55		TE	1578 DE MARIA,65		
	0625 JESSE,25	0692 KUYATT,63					
	0704 MICKAM,54	0777 BRINK,61		XE	0216 TATE,34	0242 MORRISON,59	
	0986 BLANC,62	1076 ZAPESOCHNYI,63			0271 FOX,54	0304 HANLE,52	
	1215 HUTCHINSON,64	1244 MORRISON,53			0388 KUYATT,64	0310 FOX,53	
	1373 SIMPSON,65	1530 FIQUET-FAYARD,65			0353 FOX,58	0481 CLOUTIER,59	
	1530 HAIOT,65	1871 LIPELES,65			0525 KRAUSS,59	0591 BURNS,64	
	1919 FIQUET-FAYARD,65				0692 KUYATT,63	0784 MICKAM,54	
LI	0150 BRINK,62				0707 FOX,60	0854 CLARKE,54	
C	0659 CRAWFORD,62				0986 BLANC,62	1034 FOMER,61	
ME	0012 BLEAKNEY,30	0045 MOHR,34			1069 DORMAN,59	1070 DORMAN,61	
	0213 STEVENSON,42	0242 MORRISON,59			1107 MORRISON,64	1137 KISER,62	
	0280 FITE,63	0339 OTVOS,56			1244 MORRISON,53	1453 STUBER,65	
	0481 CLOUTIER,59	0525 KRAUSS,59		KE	1 0713 KUPRIYANOV,64		
	0625 JESSE,25	0692 KUYATT,63		XE	2 0713 KUPRIYANOV,64		
	0704 MICKAM,54	0986 BLANC,62		CS	0216 TATE,34		
	1039 KANEKO,61	1068 DORMAN,61		AU	0566 BLAIS,60		
	1244 MORRISON,53	1373 SIMPSON,65		MO	0012 BLEAKNEY,30	0014 HAUPT,31	
	1453 STUBER,65	1920 ZIESEL,65			0066 MOHR,34	0211 MCFADUE,46	
NE	0290 FITE,63				0215 BELL,39	0313 MICKAM,54	
NE	1 0713 KUPRIYANOV,64				1070 DORMAN,61	1095 BLEAKNEY,29	
NA	0150 BRINK,62	0216 TATE,34			1244 MORRISON,53	1578 DE MARIA,65	
	0666 DISELER,59	1039 KANEKO,61		MO	1 0713 KUPRIYANOV,64		
	1919 FIQUET-FAYARD,65	1920 ZIESEL,65		MO	2 0713 KUPRIYANOV,64		
MO	1039 KANEKO,61	1920 ZIESEL,65		U	1261 MANN,64		
AL	0659 CRAWFORD,62			M2	0209 BLEAKNEY,30	0041 NEUHAL,42	
AR	0012 BLEAKNEY,30	0066 MOHR,34			0066 MOHR,34	0170 BAERWALD,25	
	0213 STEVENSON,42	0242 MORRISON,59			0255 SHYTH,24	0339 OTVOS,54	
	0280 FITE,63	0283 FIQUET-FAYARD,63			0539 HAYAKAWA,55	0625 JESSE,25	
	0304 HANLE,52	0339 OTVOS,56			0659 CRAWFORD,62	0660 KALLMANN,27	
	0481 COTTIN,59	0525 KRAUSS,59			1164 BRIOLIA,65	1292 BRIOLIA,65	
	0539 HAYAKAWA,55	0625 JESSE,25			1303 GEIGER,34	1415 MCGOWAN,65	
	0692 KUYATT,63	0704 MICKAM,54		OZ	0167 RANDOLPH,58	0214 HASTRUM,41	
	0777 BRINK,61	0781 FOX,60			0255 SHYTH,24	0334 STEWART,58	
	0958 MELTON,62	0986 BLANC,62			0339 OTVOS,56	0341 FROST,58	
	1034 FOMER,61	1038 KANEKO,61			0526 FROST,59	0778 DORMAN,60	
	1069 DORMAN,59	1070 DORMAN,61			0985 BRION,64	1089 MCGOWAN,64	
	1100 BECKER,64	1124 FIQUET-FAYARD,62		N2	0017 VAUGHAN,31	0066 MOHR,34	
	1162 FIQUET-FAYARD,62	1244 MORRISON,53			0214 HASTRUM,41	0271 FOX,54	
	1373 SIMPSON,65	1453 STUBER,65			0339 OTVOS,56	0523 FROST,55	
	1530 FIQUET-FAYARD,65	1919 FIQUET-FAYARD,65			0625 JESSE,25	0660 KALLMANN,27	
AR	0280 FITE,63				0778 DORMAN,60	0854 CLARKE,54	
AR	1 0713 KUPRIYANOV,64				0953 STEWART,55	1038 KANEKO,61	
K	0150 BRINK,62	0216 TATE,34			1068 DORMAN,61	1108 DORMAN,63	
	0283 FIQUET-FAYARD,63	1039 KANEKO,61			1244 MORRISON,53	1509 FINEMAN,65	
	1124 FIQUET-FAYARD,62	1530 FIQUET-FAYARD,65			1530 FIQUET-FAYARD,65	1648 ZAPESOCHNYI,61	
	1919 FIQUET-FAYARD,65				1987 HAYAKAWA,65		
CA	0283 FIQUET-FAYARD,63	1045 KANEKO,63		M20	0483 COTTIN,59	0558 SCHULZ,60	
	1124 FIQUET-FAYARD,62				0924 MANN,40	1919 FIQUET-FAYARD,65	
FE	1874 COOPER,66			N M3	1068 DORMAN,61	1530 FIQUET-FAYARD,65	
CO	1874 COOPER,66			N O	0214 HASTRUM,41	0481 CLOUTIER,59	
NI	1874 COOPER,66				0854 CLARKE,54	1068 DORMAN,61	
CU	0566 BLAIS,60				1530 FIQUET-FAYARD,65	1448 ZAPESOCHNYI,61	
ZN	0263 FIQUET-FAYARD,63	0313 MICKAM,54		CL2	0526 FROST,59	0708 FROST,60	
	1167 FIQUET-FAYARD,63	1578 DE MARIA,65		M20	0339 OTVOS,56	1067 CURRAN,61	
SE	1578 DE MARIA,65				1916 CONNOLLY,65		
KR	0216 TATE,34	0283 FIQUET-FAYARD,63		C O2	0339 OTVOS,56	0531 COLLIN,60	
	0310 FOX,53	0339 OTVOS,56			0647 ASUNOI,64	1068 DORMAN,61	
	0410 BURNS,61	0823 FROST,55			1244 MORRISON,53	1530 FIQUET-FAYARD,65	
	0824 FROST,57	0826 FROST,59			1919 FIQUET-FAYARD,65		
	0692 KUYATT,63	0784 MICKAM,54		C O	0017 VAUGHAN,31	0214 HASTRUM,41	
	0781 FOX,60	0958 MELTON,62			0271 FOX,54	0310 FOX,53	
	0986 BLANC,62	1034 FOMER,61			0339 OTVOS,56	0625 JESSE,25	
	1038 KANEKO,61	1070 DORMAN,61			0941 FINEMAN,62	1038 KANEKO,61	
	1107 MORRISON,64	1137 KISER,62			1068 DORMAN,61	1096 MOHNESS,28	
	1215 HUTCHINSON,64	1244 MORRISON,53			1648 ZAPESOCHNYI,61	1742 CUTHBERT,66	
	1493 STUBER,65	1530 FIQUET-FAYARD,65		C O	1 1742 CUTHBERT,66		
	1919 FIQUET-FAYARD,65			BR2	0708 FROST,60		
KR	1 0713 KUPRIYANOV,64	1492 BAKER,65					
KR	2 0713 KUPRIYANOV,64						

IONIZATION			EXPERIMENTAL		IONIZATION		THEORETICAL	
RELATIVE					NORMALIZED			
M CL	0339 OTVOS.56 1244 MORRISON.53		0707 FOX.60		ME 1345 LEE.65 1484 KUREPA.63 1554 LYASH.63 1557 BAUER.65 1788 BYRON.66		1457 VRIENS.65 1506 KINGSTON.65 1555 VELORE.63 1655 PEACH.66	
C M6	0066 MOHR.34 0524 FROST.57 0625 JEFFE.25		0339 OTVOS.56 0539 HAYAKAWA.55		ME 1060 VRIENS.64			
I2	0526 FROST.59		0708 FROST.60		ME 1 0057 BURGESS.63 0735 BURGESS.60 1060 VRIENS.64 1772 RUOGE.65		0417 BURGESS.61 0892 BURGESS.63 1436 BURKE.65	
M25	0339 OTVOS.56		1530 PIQUET-FAYARD.65		LI 0570 GRYZINSKI.63 1014 GRYZINSKI.65 1146 WU.44 1272 SHELTON.65 1299 MCDONELL.65 1502 MCFARLAND.65		0873 PEACH.64 1044 DRAWIN.61 1190 WU.40 1273 PEACH.65 1464 MCFARLAND.65 1655 PEACH.66	
P M3	0339 OTVOS.56				LI 1 1044 DRAWIN.61			
C S2	0339 OTVOS.56		0531 COLLIN.40		LI 2 1044 DRAWIN.61			
M D	0539 HAYAKAWA.55				BE 1273 PEACH.65 1655 PEACH.66		1502 MCFARLAND.65	
O2	0539 HAYAKAWA.55				N 0453 SEATON.59 1557 BAUER.65		1463 ROBINSON.65	
C2M4	0339 OTVOS.56		0539 HAYAKAWA.55		O 0453 SEATON.59 1557 BAUER.65		1463 ROBINSON.65	
C2M6	0339 OTVOS.56				O 4 0143 TREFFTZ.63		1046 MALIK.61	
M02	0211 MCFADDEN.46				O 5 0143 TREFFTZ.63		0814 VARSIVSKY.63	
C M3CL	0339 OTVOS.56		0524 FROST.57		NE 0147 NEU.58 0455 HILL.51 1115 OCHKUR.63 1463 ROBINSON.65 1506 KINGSTON.65		0210 INOKUTI.62 1060 VRIENS.64 1457 VRIENS.65 1484 KUREPA.63 1557 BAUER.65	
C M3BR	0339 OTVOS.56		0524 FROST.57		NE 1060 VRIENS.64			
C M3I	0339 OTVOS.56		0524 FROST.57		NE 1 1060 VRIENS.64			
I CL	0708 FROST.60				NA 1272 SHELTON.65 1476 PRESNYAKOV.65 1654 PEACH.66		1464 MCFARLAND.65 1502 MCFARLAND.65 1655 PEACH.66	
I BR	0708 FROST.60				NG 1502 MCFARLAND.65 1655 PEACH.66		1654 PEACH.66	
M202	1132 FONER.62				AR 0147 NEU.58 1014 GRYZINSKI.65 1457 VRIENS.65 1484 KUREPA.63 1557 BAUER.65		0881 GOLANT.59 1060 VRIENS.64 1463 ROBINSON.65 1506 KINGSTON.65	
C2N2	0339 OTVOS.56				AR 1060 VRIENS.64			
M C N	0339 OTVOS.56				K 1272 SHELTON.65 1502 MCFARLAND.65		1464 MCFARLAND.65	
C M3F	0524 FROST.57				CA 1502 MCFARLAND.65			
U O	1261 NANN.64				CA 1 0960 ZIRIN.62			
TE2	1578 DE MARIA.65				FE 13 0443 SCHWARTZ.59 1058 KULANDER.63		0455 HILL.51	
SE2	1578 DE MARIA.65				FE 14 1849 RUDGE.66			
S2	1578 DE MARIA.65				FE 15 1849 RUDGE.66			
		IONIZATION	THEORETICAL		VI 0140 BURNOP.40 0455 HILL.51 1044 DRAWIN.61		0452 GRYZINSKI.59 1014 GRYZINSKI.65 1115 OCHKUR.63	
		NORMALIZED			KR 0147 NEU.58 1484 KUREPA.63		1457 VRIENS.65 1506 KINGSTON.65	
M	0061 MASSEY.33 0282 YAVORSKY.45 0390 GELTMAN.56 0461 MORAND.59 0587 KOGAN.59 0825 KINGSTON.64 0844 VELORE.64 0852 PETERKOP.59 0892 BURGESS.63 0996 AKERID.60 1044 DRAWIN.61 1115 OCHKUR.63 1165 MICHAEL.63 1273 PEACH.65 1436 BURKE.65 1458 OMIOVAR.65 1476 PRESNYAKOV.65 1544 RUUGE.65 1548 VELORE.63 1595 KINGSTON.65 1648 RUDGE.66 1879 VINKALNS.65		0101 VELORE.62 0307 STAUFFER.63 0424 MCCARROLL.57 0533 GELTMAN.63 0671 STABLEN.64 0829 PETERKOP.59 0848 OMIOVAR.64 0863 GRYZINSKI.64 0913 AKERID.61 1014 GRYZINSKI.65 1071 OMIOVAR.64 1129 PETERKOP.62 1262 PRASAD.65 1426 VELORE.62 1457 VRIENS.65 1472 VELORE.65 1541 OCHKUR.65 1547 VELORE.63 1582 VELORE.65 1655 PEACH.66 1878 VINKALNS.65		AR 1060 VRIENS.64			
M *	0307 STAUFFER.63 0430 SWAN.55 1071 OMIOVAR.64 1458 OMIOVAR.65 1595 KINGSTON.65 1694 KINGSTON.66		0413 MCCREA.60 0848 OMIOVAR.64 1436 BURKE.65 1826 OMIOVAR.65 1656 PRASAD.66 1848 RUDGE.66		RB 1272 SHELTON.65 1502 MCFARLAND.65			
ME	0024 WETZEL.33 0147 NEU.58 0452 GRYZINSKI.59 0765 ITOM.60 0863 GRYZINSKI.64 1014 GRYZINSKI.65 1060 VRIENS.64 1273 PEACH.65		0001 MASSEY.33 0390 GELTMAN.56 0455 HILL.51 0838 VAN DE WALLE.61 0999 WETZEL.36 1044 DRAWIN.61 1115 OCHKUR.63 1302 SLUAN.64		SR 1502 MCFARLAND.65			
					SR 1 0960 ZIRIN.62			
					AG 0140 BURNOP.40 0455 HILL.51 1014 GRYZINSKI.65		0452 GRYZINSKI.59 0999 WETZEL.36	
					SN 40 0057 BURGESS.63			
					XE 0147 NEU.58 1484 KUREPA.63		1457 VRIENS.65 1506 KINGSTON.65	

IONIZATION		THEORETICAL		DISSOCIATION		EXPERIMENTAL	
NORMALIZED				RELATIVE			
CS	1165 MICHAEL.63 1502 MCFARLAND.65	1464 MCFARLAND.65		N2	0167 RANDOLPH.58 0778 DORMAN.60	0926 FROST.59	
CS *	1272 SHELTON.65			H2O	0924 MANN.40		
HA	1502 MCFARLAND.65			N H3	0924 MANN.40		
HG	0140 BURHOP.40 0642 PRASAD.63 1060 VRIENS.64 1557 BAUER.65	0455 HILL.51 0783 YAVORSKY.47 1115 OCHKUR.63		N O	0481 CLOUTIER.59		
HG *	1060 VRIENS.64			CL2	0708 FROST.60		
TL	1502 MCFARLAND.65			C O	0778 DORMAN.60	0941 FINEMAN.62	
NO	1558 BAUER.65			BP2	0708 FROST.60		
H2	0147 NEU.58 0455 HILL.51 0863 GRYZINSKI.64 1044 URAMIN.61 1457 VRIENS.65 1558 BAUER.65	0452 GRYZINSKI.59 0570 GRYZINSKI.63 1014 GRYZINSKI.65 1115 OCHKUR.63 1557 BAUER.65		I2	0526 FROST.59 0778 DORMAN.60	0708 FROST.60	
U2	0642 PRASAD.63 1557 BAUER.65	1457 VRIENS.65 1558 BAUER.65		C CL4	0950 HARRIOTT.54	1231 CRAGGS.42	
H2	0147 NEU.58 1457 VRIENS.65 1558 BAUER.65	0642 PRASAD.63 1557 BAUER.65		DISSOCIATION		THEORETICAL	
N O	1557 BAUER.65			NORMALIZED			
C2H2	1557 BAUER.65	1558 BAUER.65		H2	0194 MASSEY.32 1862 KHAKE.66	0695 EDELSTEIN.58	
C O	0642 PRASAD.63 1558 BAUER.65	1557 BAUER.65		H2 I	0370 IVASH.58 1465 PEEK.65	0394 KERNEN.53	
C H4	0210 INOKUTI.62			H2O	0294 MIIRA.49		
RELATIVE				RELATIVE			
H	1144 DE LA RIPELLE.49			H2	0033 SASAKI.35		
HE	1144 DE LA RIPELLE.49	1673 MITTLEMAN.66		FREE-FREE EMISSION		THEORETICAL	
NE	1144 DE LA RIPELLE.49			NORMALIZED			
NA	1144 DE LA RIPELLE.49			H	1414 LANE.64		
AR	1144 DE LA RIPELLE.49			H I	1414 LANE.64		
KR	1144 DE LA RIPELLE.49			N	0256 DEVORE.64	0939 BREENE.61	
AG	1144 DE LA RIPELLE.49			N I	0256 DEVORE.64		
AE	1144 DE LA RIPELLE.49			O	0574 BREENE.63		
H2	0005 KRAUSS.47			DISSOCIATIVE IONIZATION		EXPERIMENTAL	
O2	0005 KRAUSS.57			NORMALIZED			

DISSOCIATION		EXPERIMENTAL		NORMALIZED		EXPERIMENTAL	
NORMALIZED							
H2	0260 ENGELHARDT.63 1566 CORRIGAN.65	0384 CORRIGAN.58		H2	0041 NEWMALL.42 1410 RAPP.65	1105 ENBLANDER-GOLDEN.64 1858 ADAMCZYK.66	
H2 I	1501 DUNN.65	1503 DUNN.65		O2	0946 GLICK.64 1410 RAPP.65	1105 ENBLANDER-GOLDEN.64	
O2	0376 LASSETTRE.54 1075 SILVERMAN.64	0377 SILVERMAN.57 1460 RAPP.65		H2	0193 COOK.62 1105 ENBLANDER-GOLDEN.64	0946 GLICK.64 1410 RAPP.65	
H2	0992 SHERIDAN.61			H2O	1782 SCHUTTEN.66		
H2O	0382 LASSETTRE.58			N O	0946 GLICK.64 1410 RAPP.65	1105 ENBLANDER-GOLDEN.64	
N O	1460 RAPP.65			H2O	1105 ENBLANDER-GOLDEN.64	1410 RAPP.65	
H2O	1460 RAPP.65			C O2	1105 ENBLANDER-GOLDEN.64	1410 RAPP.65	
C O2	1460 RAPP.65			C O	1105 ENBLANDER-GOLDEN.64	1410 RAPP.65	
C O	1460 RAPP.65			C H4	0946 GLICK.64 1410 RAPP.65	1105 ENBLANDER-GOLDEN.64 1858 ADAMCZYK.66	
O2	0260 ENGELHARDT.63			O2	1105 ENBLANDER-GOLDEN.64		
RELATIVE				RELATIVE			

DISSOCIATIVE IONIZATION		EXPERIMENTAL	RADIATIVE ATTACHMENT		EXPERIMENTAL
RELATIVE			RELATIVE		
M2	0007 SASAKI.35 0041 NEWMALL.42 0130 SASAKI.41 0214 MAGSTRUM.41 0304 DUNN.63 0456 BAUER.47 0600 KALLMANN.27	0009 BLEAKNEY.30 0107 MAGSTRUM.51 0135 SASAKI.35 0255 SHYTH.24 0451 STEVENSON.60 0405 SCHAEFFER.50 1402 LOZIER.50	F	1774 POPP.65	
O2	0107 MAGSTRUM.51 0255 SHYTH.24 0526 FROST.59	0214 MAGSTRUM.41 0341 FROST.58 0778 DORMAN.60	I	0830 STEINER.64	
M2	0017 VAUGHAN.31 0214 MAGSTRUM.41 0607 TATE.32 0953 STEWART.55	0107 MAGSTRUM.51 0600 KALLMANN.27 0854 CLARKE.54 1843 BRIGLIA.64	RADIATIVE ATTACHMENT THEORETICAL		
M20	0298 SJOGREN.63 0924 MANN.40	0403 COTTIN.59	NORMALIZED		
N M3	0924 MANN.40		M	1166 JEN.33 1316 LOCHTE-HOLTGREVEN.58	1700 MASSEY.36
N O	0107 MAGSTRUM.51 0401 CLOUTIER.59 1691 DORMAN.66	0214 MAGSTRUM.41 1510 HANSON.37	O	0247 YAMANOUCHI.40 1180 MASSEY.43	1141 WATERS.43 1197 BRANSCOMB.57
CL2	0526 FROST.59	0708 FROST.40	NA	0297 HUANG.45	1300 MASSEY.36
M20	1067 CURRAN.61	1691 DORMAN.66	CL	1300 MASSEY.36	
C O	0017 VAUGHAN.31 0214 MAGSTRUM.41 0778 DORMAN.66 1096 HOUNESS.26	0107 MAGSTRUM.51 0607 TATE.32 0941 FINEMAN.62 1742 CUTHBERT.66	MO	1300 MASSEY.36	
NR2	0708 FROST.60		DISSOCIATIVE RECOMBINATION EXPERIMENTAL		
M CL	1510 HANSON.37		NORMALIZED		
C M4	0527 GEEK.55 1691 DORMAN.66	0539 HAYAKAWA.55	O2	1 1344 BIONDI.64	
I2	0526 FROST.59 0778 DORMAN.60	0708 FROST.40	M2	1 0698 FAIRE.58 1344 BIONDI.64	0703 DIALECKE.58
C CL4	0133 FOX.61 1231 CRAWFORD.52	0950 HARRIOTT.54	N M3	1 0887 COURT.64	
O2	0456 BAUER.47	0405 SCHAEFFER.50	N O	1 0920 OGERING.62	
C2M4	0539 HAYAKAWA.55		ME2	1 1344 BIONDI.64	
S F6	0133 FOX.61		AR2	1 1344 BIONDI.64	
B CL3	1110 HARRIOTT.57		KR2	1 0254 RICHARDSON.52	
M202	1132 FUNER.62		CS2	1 0177 HAMMER.63	
C2M2	1224 STEVENSON.50		N4	1 1344 BIONDI.64	
M C N	1224 STEVENSON.50		DISSOCIATIVE RECOMBINATION THEORETICAL		
T	0405 SCHAEFFER.50		NORMALIZED		
DISSOCIATIVE IONIZATION		THEORETICAL	M2	1 0368 BAUER.56	1605 WILKINS.60
RELATIVE			O2	1 0180 MISSEY.63	
M2	0342 STEVENSON.47 1144 DE LA RIPELLE.49	0304 DUNN.63	N O	1 0180 MISSEY.63 1402 BIRNONS.63	3570 SQUINES.61
O2	0342 STEVENSON.47		RADIATIVE CAPTURE EXPERIMENTAL		
RADIATIVE ATTACHMENT		EXPERIMENTAL	NORMALIZED		
NORMALIZED			M	1 0241 FOWLER.59	0746 CRAWFORD.47
M	0000 BRANSCOMB.62	1000 BRANSCOMB.62	AR	1 0355 KENTY.50	0000 MIES.61
O	0033 BRANSCOMB.58 1000 BRANSCOMB.62	0000 BRANSCOMB.62	KR	1 0000 MIES.61	
MO	1270 MEY.30		KE	1 0000 MIES.61	
O2	0000 BRANSCOMB.62	1000 BRANSCOMB.62	CS	1 1213 MOWLER.70	
			ME2	1 0002 JOHNSON.50	
			RELATIVE		
			AD	1 0000 MIES.61	
			KR	1 0000 MIES.61	
			KE	1 0000 MIES.61	

RADIATIVE CAPTURE THEORETICAL

NORMALIZED

M 1 0146 BATES.69  
0358 ZANSTRA.46  
1010 STUECKELBERG.30  
ME 1 0715 BURGESS.60  
O 1 0243 BATES.39  
1180 MASSEY.63  
M0 9 0455 MILL.51  
CA 1 0960 ZIRIN.62  
FE 13 0455 MILL.51  
SR 1 0960 ZIRIN.62  
CS 1 1805 NORCROSS.66

RELATIVE

M 1 0245 CILLIE.32

ROTATIONAL EXCITATION EXPERIMENTAL

NORMALIZED

M2 0260 ENGELHARDT.63  
M2 0181 FROST.62  
0316 ANDERSON.56  
O2 0260 ENGELHARDT.63

RELATIVE

M2 0042 BENNETT.42

ROTATIONAL EXCITATION THEORETICAL

NORMALIZED

M2 0392 BERJUDY.58  
0762 DALVARN.65  
1452 TAKAYANAGI.65  
1666 BELTMAN.66  
O2 1477 TAKAYANAGI.65  
1666 BELTMAN.66  
1816 OKSYUK.66  
M2 0481 BERJUDY.58  
1082 MUJAL.58  
1452 TAKAYANAGI.65  
1666 BELTMAN.66  
1852 CHEN.66  
M20 0385 ALTSMULDER.57  
M3 0385 ALTSMULDER.57  
C 0 0724 TAKAYANAGI.66

VIBRATIONAL EXCITATION EXPERIMENTAL

NORMALIZED

M2 0260 ENGELHARDT.63  
1043 FROST.62  
O2 1316 SCHULZ.62  
M2 0724 TAKAYANAGI.66  
0762 SCHULZ.62  
M20 1478 BEIGER.65  
C 02 1478 BEIGER.65  
C 0 0960 SCHULZ.66

VIBRATIONAL EXCITATION EXPERIMENTAL

NORMALIZED

O2 0260 ENGELHARDT.63  
C2M4 1478 BEIGER.65  
RELATIVE  
M2 0686 RANIER.31  
M2 0898 MARRIES.27  
0328 SCHULZ.59  
M20 0932 SCHULZ.61  
C 02 1065 ROZSCH.64  
C 0 0960 MARRIES.27  
0328 SCHULZ.59

VIBRATIONAL EXCITATION THEORETICAL

NORMALIZED

M2 0843 WU.67  
0434 CANSON.54  
0962 CHEN.62  
1564 BREIG.65  
M2 0482 KERNER.53  
0644 CHEN.64  
1452 CHEN.66  
M2 1478 BEIGER.65  
C 02 1478 BEIGER.65  
C 0 1564 BREIG.65  
C2M4 1478 BEIGER.65  
RELATIVE  
M2 1331 HERZENBERG.62

DISSOCIATIVE ATTACHMENT EXPERIMENTAL

NORMALIZED

M2 0324 SCHULZ.59  
0960 RAPP.64  
1451 RAPP.65  
O2 0131 CHANIN.59  
0337 TOSER.59  
0803 CRABBS.67  
0936 ASUMI.63  
0960 RAPP.64  
1200 SCHULZ.62  
1809 CHRISTOPHER.65  
M20 0764 BUCHELNIKOVA.59  
M 0 0960 RAPP.64  
1460 RAPP.65  
M20 0960 RAPP.64  
1460 RAPP.65  
C 02 0960 CRABBS.66  
0960 RAPP.64  
1200 SCHULZ.62  
C 0 0960 CRABBS.66  
0960 RAPP.64  
1200 SCHULZ.62  
M 02 0764 BUCHELNIKOVA.59  
12 0134 BUCHELNIKOVA.59  
0960 RAPP.64  
M 0 1451 RAPP.65  
M2 1372 RAPP.64  
1460 RAPP.65  
M 0 0960 MICHAM.66  
1460 RAPP.65

DISSOCIATIVE ATTACHMENT		EXPERIMENTAL	TOTAL SCATTERING		EXPERIMENTAL
NORMALIZED			NORMALIZED		
M 02	0770 FOX.60		M	0305 MAECKER.55	0322 BRACKMAN.50
M BR	0764 MULLERINOVA.59			0454 DRAVIN.56	0493 KOLLSAID.62
				0502 WIESE.63	0530 HAMMER.60
SB CL3	1270 BROH.63			1010 MEYNABER.61	
RELATIVE			ME	0001 BRODE.25	0010 NORMAND.30
				0072 MAYER.21	0073 RAMSAUER.21
				0074 RAMSAUER.21	0082 BRUCHE.27
				0084 RAMSAUER.29	0094 RAMSAUER.32
				0116 FUCHTBAUER.34	0160 GREEN.30
				0161 PALMER.31	0174 KOLLATH.20
				0186 RAMSAUER.23	0192 FRANCIS.07
				0201 TOWNSEND.23	0233 DOUGLAS.40
				0240 CHEN.61	0306 ANDERSON.55
				0312 PHELPS.51	0314 GULDEN.54
				0317 ANDERSON.56	0454 DRAVIN.56
				0530 PACK.61	0594 HIRSHFELD.50
				0637 LANGMUIR.20	0619 BOWE.60
				0840 GOLDEH.65	0880 PHELPS.48
				0995 GOODRICH.37	1041 BULEWICZ.62
				1062 FROST.64	1340 GOLDMAN.65
				1473 HARRIS.63	1489 CHOMPON.05
				1501 KOZLOV.65	1706 KOZLOV.65
			ME	0860 MEYNABER.64	
			ME	1233 DOUGLAS.50	0306 ANDERSON.55
			LI	0016 PEREL.62	
			C	0305 MAECKER.55	
			M	0026 MEYNABER.63	0305 MAECKER.55
			O	0305 MAECKER.55	0325 LIN.50
				1013 MEYNABER.61	1490 SUNSHINE.05
				1577 DAIBER.65	
			F	0550 MAECKER.56	
			ME	0010 NORMAND.30	0074 RAMSAUER.21
				0082 BRUCHE.27	0084 BRUCHE.29
				0084 RAMSAUER.29	0094 RAMSAUER.32
				0116 FUCHTBAUER.34	0174 KOLLATH.20
				0186 RAMSAUER.23	0192 FRANCIS.07
				0637 LANGMUIR.20	0619 BOWE.60
				1019 CHEN.64	1041 BULEWICZ.62
				1400 GILARDINI.57	1473 HARRIS.63
			NA	0006 BRODE.29	0016 PEREL.62
			AR	0001 BRODE.25	0010 NORMAND.30
				0072 MAYER.21	0073 RAMSAUER.21
				0074 RAMSAUER.21	0075 RAMSAUER.23
				0076 RUSCH.26	0082 BRUCHE.27
				0084 RAMSAUER.29	0094 RAMSAUER.32
				0095 RAMSAUER.32	0116 FUCHTBAUER.34
				0160 GREEN.30	0174 KOLLATH.20
				0175 GAERTNER.31	0186 RAMSAUER.23
				0197 TOWNSEND.22	0199 TOWNSEND.22
				0292 ENGELHARDT.64	0312 PHELPS.51
				0454 DRAVIN.56	0530 PACK.61
				0538 HAMMER.56	0637 LANGMUIR.20
				0819 BOWE.60	0840 GOLDEH.65
				1007 BRODE.32	1041 BULEWICZ.62
				1062 FROST.64	1473 HARRIS.63
				1577 DAIBER.65	1591 KOZLOV.65
				1752 WAMLIN.31	1786 KOZLOV.65
				1891 ABERTH.63	1962 GOLUEN.60
			K	0006 BRODE.29	0016 PEREL.62
			FE	0305 MAECKER.55	
			ZN	0008 BRODE.30	0046 BRODE.25
			KR	0075 RAMSAUER.23	0086 RAMSAUER.29
				0095 RAMSAUER.32	0118 FUCHTBAUER.35
				0174 KOLLATH.20	0186 RAMSAUER.23
				0312 PHELPS.51	0439 PACK.62
				0819 BOWE.60	1062 FROST.64
			RB	0006 BRODE.29	
			CD	0008 BRODE.30	0046 BRODE.25
			XE	0075 RAMSAUER.23	0086 RAMSAUER.29
				0095 RAMSAUER.32	0117 FUCHTBAUER.35
				0186 RAMSAUER.23	0312 PHELPS.51
				0439 PACK.62	0819 BOWE.60
				1062 FROST.64	
			CS	0006 BRODE.29	0016 PEREL.62
				0132 MORGULIS.63	0140 HIRLIN.62
				0182 CHEN.62	0764 BOECKNER.33
				0768 MULLANEY.61	0769 FLAVIN.63
				0785 ROELING.63	0850 FLAVIN.63
				0872 MEYERAND.64	1473 HARRIS.63
DISSOCIATIVE ATTACHMENT		THEORETICAL			
NORMALIZED					
M2	0207 CHEN.63				

TOTAL SCATTERING		EXPERIMENTAL		TOTAL SCATTERING		EXPERIMENTAL	
NORMALIZED				NORMALIZED			
CS	1 0744 BROCKNER.33			C2M	0005 BRUCHE.29	0203 SALMON.20	
M6	0021 TATE.32	0046 BROCK.25			0005 FORESTER.61		
	0047 BROCK.29	0069 ARNOT.35		C2M	0009 BRUCHE.30		
	0117 FUCH-TAUBER.35	0157 JONES.20		S O2	0007 BATES.62		
	0160 GREEN.37	0161 PALMER.31		C HCL	0091 HOLST.31		
	0172 BEUTHE.27	0590 MCCUTCHEEN.50		M C N	0007 BATES.62		
	0637 LAMMUTH.28	0675 SIMONS.30		RELATIVE			
	1746 HALL.26			ME	0009 HUGHES.35		
TL	0013 BROCK.31			ME	0126 RUSCH.25		
M2	0001 BROCK.25	0010 NORMAN.30		AR	0126 RUSCH.25	0171 ZACHMANN.27	
	0072 WATERS.21	0073 RAMSAUER.21		K	0016 PEREL.62	0320 RUBIN.00	
	0077 BRUCHE.26	0079 BRUCHE.27		NR	0126 RUSCH.25		
	0087 RAMSAUER.30	0093 RAMSAUER.4.30		CO	0100 HINDENSKIL.23		
	0094 RAMSAUER.32	0100 GREEN.31		M6	0163 PEARSON.31	0160 HINDENSKIL.23	
	0114 KOLLATH.28	0175 GAEHTHE.4.31		M2	0126 RUSCH.25	0171 ZACHMANN.27	
	0161 FROST.62	0186 RAMSAUER.4.23		O2	1013 KEYNABER.61		
	0180 BERGSTEIN.62	0195 TOMSEN.21		C M	0209 BLOCKLEY.24		
	0199 TOMSEN.22	0240 JAMERIN.51		TOTAL SCATTERING			
	0312 PHELPS.51	0352 CHAMPTON.52		THEORETICAL			
	0366 BERT.50	0430 PACK.61		NORMALIZED			
	0530 HAMMER.56	0637 LAMMUTH.28		ME	0000 O'ALLEY.63		
	0605 FORMSTE.61	1043 FROST.62		LI	0910 DAMBURG.60	0000 KARLE.64	
	1375 GOLDEN.65	1507 DUBOVI.60		ME	1340 O'ALLEY.63		
	1787 GOLDEN.60			NA	0010 DAMBURG.60		
O2	0007 RAMSAUER.30	0195 TOMSEN.21		AR	0000 O'ALLEY.63	0452 GRZYNSKI.59	
	0259 BRUCHE.27	0377 SILVERMAN.57		K	0010 DAMBURG.60		
	0846 ABERTH.64	1577 DAIBER.65		NR	0000 O'ALLEY.63		
	1091 ABERTH.63			XE	0050 O'ALLEY.63		
M2	0001 BROCK.25	0010 NORMAN.30		CS	0010 DAMBURG.60	1023 SALMON.61	
	0026 KEYNABER.63	0037 FISK.37			1202 ROBINSON.62		
	0072 WATERS.21	0073 RAMSAUER.21					
	0077 BRUCHE.26	0079 BRUCHE.27					
	0087 RAMSAUER.30	0174 KOLLATH.29					
	0101 FROST.62	0186 RAMSAUER.4.23					
	0195 TOMSEN.21	0210 ENGELHARDT.64					
	0312 PHELPS.51	0316 ANDERSON.56					
	0352 CHAMPTON.52	0530 PACK.61					
	0637 LAMMUTH.28	0604 HAAS.57					
	0605 FORMSTE.61	0607 BATES.62					
	0846 ABERTH.64	0902 STOTZ.63					
	1041 BULEVITZ.62	1043 FROST.62					
	1473 HARRIS.63	1577 DAIBER.65					
	1591 KOZLOV.65	1706 KOZLOV.65					
	1891 ABERTH.63						
M20	0004 BRUCHE.29	0439 PACK.62					
	0007 BATES.62	1050 TARET.60					
M H3	0004 BRUCHE.29	0439 PACK.62					
	0007 BATES.62						
M O	0200 SINKER.23	0259 BRUCHE.27					
C2M2	0005 BRUCHE.29						
CL2	0037 FISK.37	0602 BAILEY.35					
M20	0093 RAMSAUER.30	0159 BAILEY.32					
	0174 KOLLATH.28	0200 SKINKER.23					
	0259 BRUCHE.27	0439 PACK.62					
	0607 BATES.62						
C O2	0072 WATERS.21	0001 RAMSAUER.27					
	0087 RAMSAUER.30	0093 RAMSAUER.4.30					
	0094 RAMSAUER.32	0174 KOLLATH.28					
	0100 SKINKER.22	0259 BRUCHE.27					
	0430 PACK.62	0605 FORESTER.61					
	0607 BATES.62						
C O	0001 BROCK.25	0010 NORMAN.30					
	0007 RAMSAUER.30	0094 RAMSAUER.32					
	0174 KOLLATH.28	0200 SKINKER.23					
	0259 BRUCHE.27	0439 PACK.62					
BR2	0603 BAILEY.37						
M CL	0000 BRUCHE.27						
C M4	0001 BROCK.25	0004 BRUCHE.29					
	0007 RAMSAUER.30	0009 BRUCHE.30					
	0174 KOLLATH.28	0192 FRANCIS.47					
	0259 BRUCHE.27	0605 FORESTER.61					
	0973 FROMMOLD.59	1033 INK.65					
O4	0991 HOLST.31						
I2	0677 HEALEY.30						
C CL4	0991 HOLST.31						
O2	0100 BERNSTEIN.52	0439 PACK.62					
	1375 GOLDEN.65	1420 HALL.55					
	1787 GOLDEN.60						



# POSITRON PAPERS

## IONIZATION

## THEORETICAL

### NORMALIZED

H 0649 CHESHIRE.64

### TOTAL ELASTIC SCATTERING EXPERIMENTAL

#### NORMALIZED

HE 1196 HADGER.56  
HE 1196 HADGER.56  
AR 1196 HADGER.56

### TOTAL ELASTIC SCATTERING THEORETICAL

#### NORMALIZED

H	0003 BURKE.63	0140 DAMBURG.63
	0204 YERKIN.62	0490 SCHWARTZ.61
	0536 ROTENBERG.62	0789 RUFFINE.60
	0659 SMITH.61	0905 HASSEY.58
	0906 MOUSSA.59	0917 SPRUCH.60
	1015 SMITH.61	1023 KINGSTON.61
	1102 DRACHMAN.65	1210 NOISEWITSCH.58
	1022 DRACHMAN.65	1443 HAMM.60
	1494 ALLISON.61	1495 GRAYSON.62
	1499 HAMM.65	1500 KLEINMAN.65
	1571 STONE.66	1500 ARNSTEAD.65
	1930 KLEINMAN.65	
H	0059 SMITH.60	
HE	0905 HASSEY.58	1121 HALIK.61
	1195 TEUTSCH.56	1405 KESTNER.65
	1494 ALLISON.61	1819 DRACHMAN.65
C	1121 HALIK.61	
H	1121 HALIK.61	
O	1121 HALIK.61	
F	1121 HALIK.61	
HE	0905 HASSEY.58	1121 HALIK.61
	1195 TEUTSCH.56	
AR	0905 HASSEY.58	1121 HALIK.61
	1195 TEUTSCH.56	
U	6 1519 SINGH.62	
H2	0905 HASSEY.58	

### DIFFERENTIAL ELASTIC SCATTERING THEORETICAL

#### NORMALIZED

H	0490 SCHWARTZ.61	0536 ROTENBERG.62
	0544 NOISEWITSCH.59	0906 MOUSSA.59
HE	0544 NOISEWITSCH.59	

### ELECTRONIC EXCITATION THEORETICAL

#### NORMALIZED

H	0003 BURKE.63	0140 DAMBURG.63
	0659 SMITH.60	1257 NOISEWITSCH.65
H	0659 SMITH.60	

### ELECTRON DETACHMENT THEORETICAL

#### NORMALIZED

H - 0576 RUOGE.64

# BIBLIOGRAPHIC REFERENCES

- 1 BRODE R B THE ABSORPTION COEFFICIENT FOR SLOW ELECTRONS IN GASES  
PHYS REV. VOL 25, 636. (1929)
- 2 COMPTON K T, VAN VOORHIS C C PROBABILITY OF IONIZATION OF GAS MOLECULES BY ELECTRON IMPACTS  
PHYS REV. VOL 26, 436. (1929)
- 3 DYNANO E S ON ELECTRON SCATTERING IN HELIUM  
PHYS REV. VOL 29, 433. (1927)
- 4 JONES T J PROBABILITY OF IONIZATION OF MERCURY VAPOR BY ELECTRON IMPACT  
PHYS REV. VOL 29, 822. (1927)
- 5 KRAUSS H, KROPP A VIBRATIONAL STRUCTURE IN THE IONIZATION EFFICIENCY CURVES OF  
HYDROGEN AND DEUTERIUM MOLECULES  
J CHEM PHYS. VOL 26, 1776. (1957)
- 6 BRODE R B THE ABSORPTION COEFFICIENT FOR SLOW ELECTRONS IN ALKALI METAL VAPORS  
PHYS REV. VOL 34, 673. (1929)
- 7 SASAKI N, NAKAO T MOLECULAR ORIENTATION AND THE PROBABILITY OF DISSOCIATION OF  
MOLECULES BY ELECTRON IMPACT  
NATURE. VOL 136, 260. (1935)
- 8 BRODE R B THE ABSORPTION COEFFICIENT FOR SLOW ELECTRONS IN CADMIUM AND ZINC  
VAPORS  
PHYS REV. VOL 35, 566. (1930)
- 9 BLEAKNEY V THE IONIZATION OF HYDROGEN BY SINGLE ELECTRON IMPACT  
PHYS REV. VOL 35, 1180. (1930)
- 10 NORMAND C E THE ABSORPTION COEFFICIENT FOR SLOW ELECTRONS IN GASES  
PHYS REV. VOL 35, 1217. (1930)
- 11 MCWILLEN J H ANGLE AND ENERGY DISTRIBUTION OF ELECTRONS SCATTERED BY HELIUM,  
ARGON, AND HYDROGEN  
PHYS REV. VOL 36, 1034. (1930)
- 12 BLEAKNEY V IONIZATION POTENTIALS AND PROBABILITIES FOR THE FORMATION OF  
MULTIPLY CHARGED IONS IN HELIUM, NEON, AND ARGON  
PHYS REV. VOL 36, 1383. (1930)
- 13 BRODE R B THE ABSORPTION COEFFICIENT FOR SLOW ELECTRONS IN THALLIUM VAPOR  
PHYS REV. VOL 37, 570. (1931)
- 14 HAUPT C R THE PROBABILITY LAW GOVERNING IONIZATION BY ELECTRON IMPACT IN  
MERCURY VAPOR  
PHYS REV. VOL 38, 282. (1931)
- 15 MICHELS W C LOW VOLTAGE EXCITATION OF SODIUM  
PHYS REV. VOL 38, 712. (1931)
- 16 PEREL J, ENGLANDER P, BEDERSON B MEASUREMENT OF TOTAL CROSS SECTIONS FOR THE SCATTERING OF LOW-ENERGY  
ELECTRONS BY LITHIUM, SODIUM, AND POTASSIUM  
PHYS REV. VOL 128, 1148. (1962)
- 17 VAUGHAN A L MASS SPECTROGRAPH ANALYSES, AND CRITICAL POTENTIALS FOR THE  
PRODUCTION OF IONS BY ELECTRON IMPACT, IN NITROGEN AND CARBON  
MONOXIDE  
PHYS REV. VOL 38, 1687. (1931)
- 18 TATE J T, SMITH P T THE EFFICIENCIES OF IONIZATION AND IONIZATION POTENTIALS OF VARIOUS  
GASES UNDER ELECTRON IMPACT  
PHYS REV. VOL 39, 270. (1932)
- 19 PENNEY W G THE THEORY OF THE EXCITATION OF ATOMIC MERCURY BY ELECTRON IMPACT  
PHYS REV. VOL 39, 467. (1932)
- 20 HUGHES A L, MCWILLEN J H INELASTIC AND ELASTIC ELECTRON SCATTERING IN ARGON  
PHYS REV. VOL 39, 585. (1932)
- 21 TATE J T, PALMER R R THE ANGULAR DISTRIBUTION OF ELECTRONS SCATTERED ELASTICALLY AND  
INELASTICALLY IN MERCURY VAPOR  
PHYS REV. VOL 40, 731. (1932)
- 22 WEBB G H THE ELASTIC SCATTERING OF ELECTRONS IN ARGON AND KRYPTON  
PHYS REV. VOL 47, 379. (1935)
- 23 HUGHES A L, MCWILLEN J H ELASTIC AND INELASTIC ELECTRON SCATTERING IN HYDROGEN  
PHYS REV. VOL 41, 39. (1932)

24. WETZEL, H. W. THE QUANTUM MECHANICAL CROSS SECTION FOR IONIZATION OF HELIUM BY ELECTRON IMPACT. PHYS REV. VOL 44, 25, (1933)
25. MORSE, P. M., ALLIS, W. P. THE EFFECT OF EXCHANGE ON THE SCATTERING OF SLOW ELECTRONS FROM ATOMS. PHYS REV. VOL 44, 269, (1933)
26. MEYHAWER, R., ROTHE, E. W., MARINO, L. I., THUJILLO, S. M. LOW-ENERGY ELECTRON SCATTERING FROM ATOMIC NITROGEN. PHYS REV. VOL 129, 2069, (1963)
27. HUGHES, A. J., MCHILLEN, J. M. INELASTIC ELECTRON SCATTERING BY HELIUM ATOMS. PHYS REV. VOL 44, 20, (1933)
28. CORINALDESI, E., LIN, M. L. ON A BORN APPROXIMATION FOR ELECTRON-HYDROGEN SCATTERING. NUOVO CIMENTO, VOL 24, 451, (1963)
29. LISKA, J. W. EFFICIENCIES OF IONIZATION OF HELIUM AND MERCURY BY ELECTRON IMPACT AT HIGH VOLTAGES. PHYS REV. VOL 46, 169, (1934)
30. MCHILLEN, J. M. ELASTIC ELECTRON SCATTERING IN POTASSIUM. PHYS REV. VOL 46, 983, (1934)
31. WEBB, G. M. THE ELASTIC SCATTERING OF ELECTRONS IN MOLECULAR HYDROGEN. PHYS REV. VOL 47, 384, (1935)
32. GORSHANOVA, A. F., DAMBURG, R. CONSIDERATION OF STRONG COUPLING IN COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS. OPT SPECTRY USSR ENGLISH transl. VOL 12, 55, (1962)
32. SASAKI, N., NAKAO, T. MOLEKULARE ORIENTIERUNG UND DIE ANREGUNGS-UND DISSOZIATIONSWAHRSCHENLICHKEIT DES WASSERSTOFFMOLEKULS DURCH ELEKTROENSTOSS. PROC IMP ACAD TOKYO, VOL 11, 413, (1935)
34. FISK, J. B. THEORY OF THE SCATTERING OF SLOW ELECTRONS BY DIATOMIC MOLECULES. PHYS REV. VOL 49, 167, (1936)
35. BLEAKNEY, W., SMITH, L. G. THE IONIZATION PROBABILITY OF  $He^{++}$ . PHYS REV. VOL 49, 402, (1936)
36. GARRETT, W. R., MANN, R. A. MODEL FOR THE SCATTERING OF SLOW ELECTRONS BY CESIUM ATOMS. PHYS REV. VOL 130, 658, (1963)
37. FISK, J. B. ON THE CROSS SECTIONS OF  $Cl_2$  AND  $N_2$  FOR SLOW ELECTRONS. PHYS REV. VOL 51, 25, (1937)
38. BRANSCOMB, L., BURCH, O. S., SMITH, S. J., GELTMAN, S. PHOTODETACHMENT CROSS SECTION AND THE ELECTRON AFFINITY OF ATOMIC OXYGEN. PHYS REV. VOL 111, 504, (1958)
39. BUNDY, F. P. EXCITATION FUNCTIONS OF THE AURORAL BANDS OF  $(N_2)^+$  AND THE COMET-TAIL BANDS OF  $IC(O)^+$ , EXCITED BY ELECTRON IMPACT. PHYS REV. VOL 52, 698, (1937)
40. NOTTINGHAM, W. B. IONIZATION AND EXCITATION IN MERCURY VAPOR PRODUCED BY ELECTRON BOMBARDMENT. PHYS REV. VOL 53, 203, (1939)
41. NEWMALL, M. F. PROTON PRODUCTION BY ELECTRON COLLISIONS IN MOLECULAR HYDROGEN. PHYS REV. VOL 62, 11, (1942)
42. BENNETT, W. M., THOMAS, L. M. MOBILITIES IN SOME FREE ELECTRON GASES. PHYS REV. VOL 62, 41, (1942)
43. WU, T. Y. EXCITATION OF MOLECULAR VIBRATIONS BY ELECTRONS. PHYS REV. VOL 71, 111, (1947)
44. BURKE, V. M., MCCARROLL, R. ELECTRON SCATTERING BY ATOMIC HYDROGEN IN THE 1S, 2S OR 2P STATE, II. PROC PHYS SOC LONDON, VOL 80, 422, (1962)
45. ROSCOE, R. THE EXCITATION OF THE HYDROGEN MOLECULE BY ELECTRON IMPACT. PHIL MAG, VOL 31, 349, (1941)
46. RHODE, R. B. THE ABSORPTION COEFFICIENT FOR SLOW ELECTRONS IN THE VAPOURS OF MERCURY, CADMIUM AND ZINC. PROC ROY SOC LONDON SER A, VOL 109, 397, (1925)
47. RHODE, R. B. THE ABSORPTION COEFFICIENT FOR SLOW ELECTRONS IN MERCURY VAPOUR. PROC ROY SOC LONDON SER A, VOL 125, 134, (1929)

- 48 MOTT N F THE SCATTERING OF ELECTRONS BY ATOMS  
PROC ROY SOC LONDON SER A, VOL 127, 658, (1930)
- 49 BULLARD E C, MASSEY H S W THE ELASTIC SCATTERING OF SLOW ELECTRONS IN ARGON  
PROC ROY SOC LONDON SER A, VOL 130, 579, (1931)
- 50 ARNOT F L THE DIFFRACTION OF ELECTRONS IN MERCURY VAPOUR  
PROC ROY SOC LONDON SER A, VOL 130, 655, (1931)
- 51 MASSEY H S W, MOHR C B O THE COLLISION OF ELECTRONS WITH SIMPLE ATOMIC SYSTEMS AND ELECTRON EXCHANGE  
PROC ROY SOC LONDON SER A, VOL 132, 605, (1931)
- 52 ARNOT F L THE DIFFRACTION OF ELECTRONS IN GASES  
PROC ROY SOC LONDON SER A, VOL 133, 615, (1931)
- 53 BULLARD E C, MASSEY H S W THE ELASTIC SCATTERING OF SLOW ELECTRONS IN GASES. II.  
PROC ROY SOC LONDON SER A, VOL 133, 637, (1931)
- 54 MASSEY H S W, MOHR C B O THE COLLISION OF SLOW ELECTRONS WITH ATOMS. I. GENERAL THEORY AND ELASTIC COLLISIONS  
PROC ROY SOC LONDON SER A, VOL 136, 289, (1932)
- 55 McDougall J THE MOTION OF ELECTRONS IN THE STATIC FIELDS OF HYDROGEN AND HELIUM  
PROC ROY SOC LONDON SER A, VOL 136, 549, (1932)
- 56 LEES J M THE EXCITATION FUNCTION OF HELIUM  
PROC ROY SOC LONDON SER A, VOL 137, 173, (1932)
- 57 BURGESS A, RUDGE M R H THE IONIZATION OF HYDROGENIC POSITIVE IONS BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 273, 372, (1963)
- 58 MOHR C B O, NICOLL F M INELASTIC ELECTRON SCATTERING IN GASES. I.  
PROC ROY SOC LONDON SER A, VOL 138, 229, (1932)
- 59 MOHR C B O, NICOLL F M THE LARGE ANGLE SCATTERING OF ELECTRONS IN GASES. II.  
PROC ROY SOC LONDON SER A, VOL 138, 469, (1932)
- 60 O'MALLEY T F EXTRAPOLATION OF ELECTRON-RARE GAS ATOM CROSS SECTIONS TO ZERO ENERGY  
PHYS REV, VOL 130, 1020, (1963)
- 61 MASSEY H S W, MOHR C B O THE COLLISION OF SLOW ELECTRONS WITH ATOMS. III. THE EXCITATION AND IONIZATION OF HELIUM BY ELECTRONS OF MODERATE VELOCITY  
PROC ROY SOC LONDON SER A, VOL 140, 613, (1933)
- 62 CHILDS E C, MASSEY H S W THE SCATTERING OF ELECTRONS BY METAL VAPOURS. I. CADMIUM  
PROC ROY SOC LONDON SER A, VOL 141, 473, (1933)
- 63 NICOLL F M, MOHR C B O THE INELASTIC SCATTERING OF SLOW ELECTRONS IN GASES. III.  
PROC ROY SOC LONDON SER A, VOL 142, 320, (1933)
- 64 CHILDS E C, MASSEY H S W THE SCATTERING OF ELECTRONS BY METAL VAPOURS. II. ZINC  
PROC ROY SOC LONDON SER A, VOL 142, 509, (1933)
- 65 ARNOT F L THE DIFFRACTION OF ELECTRONS IN THE HALOGENS  
PROC ROY SOC LONDON SER A, VOL 144, 360, (1934)
- 66 MOHR C B O, NICOLL F M THE SCATTERING OF ELECTRONS IN IONIZING COLLISIONS WITH GAS ATOMS  
PROC ROY SOC LONDON SER A, VOL 144, 590, (1934)
- 67 WHIDDINGTON R, TAYLOR J E SMALL ANGLE INELASTIC ELECTRON SCATTERING IN HELIUM, NEON, AND ARGON  
PROC ROY SOC LONDON SER A, VOL 145, 465, (1934)
- 68 MASSEY H S W, MOHR C B O THE COLLISIONS OF SLOW ELECTRONS WITH ATOMS. IV.  
PROC ROY SOC LONDON SER A, VOL 146, 880, (1934)
- 69 ARNOT F L, BAINES G O ELASTIC AND INELASTIC CROSS-SECTIONS OF THE MERCURY ATOM  
PROC ROY SOC LONDON SER A, VOL 151, 256, (1935)
- 70 BUCKINGHAM R A, MASSEY H S W, TIBBS S R A SELF-CONSISTENT FIELD FOR METHANE AND ITS APPLICATIONS  
PROC ROY SOC LONDON SER A, VOL 170, 119, (1941)
- 71 BATES D R, MASSEY H S W THE BASIC REACTIONS IN THE UPPER ATMOSPHERE. II. THE THEORY OF RECOMBINATION IN THE IONIZED LAYERS  
PROC ROY SOC LONDON SER A, VOL 102, 1, (1947)
- 72 MAYER H F ÜBER DAS VERHALTEN VON MOLEKÜLEN GEGENÜBER FREIEN LANGSAMEN ELEKTRONEN  
ANN PHYSIK, VOL 64, 451, (1921)

- 73 RAMSAUER C      ÜBER DEN WIRKUNGSQUERSCHNITT DER GASMOLEKULE GEGENÜBER LANGSAMEN ELEKTROKEN  
ANN PHYSIK, VOL 64, 515, (1921)
- 74 RAMSAUER C      ÜBER DEN WIRKUNGSQUERSCHNITT DER GASMOLEKULE GEGENÜBER LANGSAMEN ELEKTROKEN, I. FORTSETZUNG  
ANN PHYSIK, VOL 66, 546, (1921)
- 75 RAMSAUER C      ÜBER DEN WIRKUNGSQUERSCHNITT DER GASMOLEKULE GEGENÜBER LANGSAMEN ELEKTROKEN, II. FORTSETZUNG UND SCHLUSS  
ANN PHYSIK, VOL 72, 349, (1923)
- 76 RUSCH H      ÜBER EINE NEUE METHODE ZUR BESTIMMUNG DES WIRKUNGSQUERSCHNITTES GEGENÜBER LANGSAMEN ELEKTROKEN  
ANN PHYSIK, VOL 80, 707, (1926)
- 77 BRÜCHE E      ÜBER DEN QUERSCHNITT VON WASSERSTOFF- UND STICKSTOFFMOLEKULEN GEGENÜBER LANGSAMEN ELEKTROKEN  
ANN PHYSIK, VOL 81, 537, (1926)
- 78 ZAPESUCHNYI I P, DASHCHENKO A I      AN OSCILLOGRAPHIC METHOD OF STUDYING OPTICAL EXCITATION FUNCTIONS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 11, 365, (1961)
- 79 BRÜCHE E      ÜBER DEN QUERSCHNITT VON WASSERSTOFF- UND STICKSTOFFMOLEKULEN GEGENÜBER LANGSAMEN ELEKTROKEN  
ANN PHYSIK, VOL 82, 912, (1927)
- 80 BRÜCHE E      ÜBER DIE QUERSCHNITTSKURVE DES CHLORWASSERSTOFFES GEGENÜBER LANGSAMEN ELEKTROKEN UND IHREN VERGLEICH MIT DER ARGONKURVE  
ANN PHYSIK, VOL 82, 25, (1926)
- 81 RAMSAUER C      ÜBER DEN WIRKUNGSQUERSCHNITT DER KOHLENSÄUREMOLEKULE GEGENÜBER LANGSAMEN ELEKTROKEN  
ANN PHYSIK, VOL 83, 1124, (1927)
- 82 BRÜCHE E, LILIENTHAL U, SCHROEDER K      ÜBER DEN WIRKUNGSQUERSCHNITT DER EDELGASE AR, NE, HE GEGENÜBER LANGSAMEN ELEKTROKEN  
ANN PHYSIK, VOL 84, 274, (1927)
- 83 BURKE P G, SMITH K, SCHEY H M      COLLISIONS OF SLOW ELECTRONS AND POSITRONS WITH ATOMIC HYDROGEN  
PHYS REV, VOL 129, 1258, (1963)
- 84 BRÜCHE E      WIRKUNGSQUERSCHNITT UND MOLEKELBAU IN DEN PSEUDOEDELGASREIHE, NE, H F, H<sub>2</sub>O, N H<sub>3</sub>, C H<sub>4</sub>.  
ANN PHYSIK, VOL 1, 93, (1929)
- 85 BRÜCHE E      WIRKUNGSQUERSCHNITT UND MOLEKELBAU DER ISOSTEREN REIHE, N<sub>2</sub> - (CH)<sub>2</sub> und O<sub>2</sub> - (NH)<sub>2</sub> - (CH<sub>2</sub>)<sub>2</sub>  
ANN PHYSIK, VOL 2, 909, (1929)
- 86 RAMSAUER C, KOLLATH R      ÜBER DEN WIRKUNGSQUERSCHNITT DER EDELGASMOLEKULE GEGENÜBER ELEKTROKEN UNTERHALB 1 VOLT  
ANN PHYSIK, VOL 3, 536, (1929)
- 87 RAMSAUER C, KOLLATH R      ÜBER DEN WIRKUNGSQUERSCHNITT DER NICHEDELGASMOLEKULE GEGENÜBER ELEKTROKEN UNTERHALB 1 VOLT  
ANN PHYSIK, VOL 4, 91, (1930)
- 88 FUNK H      ÜBER DIE IONISIERUNG VON ALKALIATOMEN DURCH LANGSAME ELEKTROKEN  
ANN PHYSIK, VOL 4, 149, (1930)
- 89 BRÜCHE E      WIRKUNGSQUERSCHNITT UND MOLEKELBAU IN DER KOHLENWASSERSTOFFREIHE, C H<sub>4</sub>, C<sub>2</sub>H<sub>6</sub>, C<sub>3</sub>H<sub>8</sub>, C<sub>4</sub>H<sub>10</sub>  
ANN PHYSIK, VOL 4, 387, (1930)
- 90 BRANSCOMB L      PHOTOEYACHMENT  
(IN) ATOMIC AND MOLECULAR PROCESSES, ACADEMIC PRESS, INC., NEW YORK, 1962, PP. 100-139
- 91 DAMBUNG R      EXCITATION OF THE 2S AND 2P LEVELS OF THE HYDROGEN ATOM BY ELECTRON IMPACT  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 12, 445, (1962)
- 92 HANLE J, SCHAFERNICHT W      MESSUNG DER LICHTAUSBEUTE IM QUECKSILBERSPEKTRUM BEI ELEKTROKENSTOSSANREGUNG  
ANN PHYSIK, VOL 6, 905, (1930)
- 93 RAMSAUER C, KOLLATH R      ÜBER DEN WIRKUNGSQUERSCHNITT DER GASMOLEKULE GEGENÜBER ELEKTROKEN UNTERHALB 1 VOLT, NACHTRAG  
ANN PHYSIK, VOL 7, 176, (1930)

- 94 RAMSAUER C, KOLLATH R  
DIE WINKELVERTEILUNG BEI DER STREUUNG LANGSAMER ELEKTROEN AN  
GASMOLEKULEN. II.FORTSETZUNG  
ANN PHYSIK, VOL 12, 520, (1932)
- 95 RAMSAUER C, KOLLATH R  
DIE WINKELVERTEILUNG BEI DER STREUUNG LANGSAMER ELEKTROEN AN  
GASMOLEKULEN. III.FORTSETZUNG UND SCHLUSS  
ANN PHYSIK, VOL 12, 837 (1932)
- 96 VETTHELEIN P  
MESSUNGEN VON ELEKTRISCHEN ANREGUNGSFUNKTIONEN AN QUECKSILBER  
ANN PHYSIK, VOL 35, 251, (1939)
- 97 DABUNG R, PETERKOP R K  
ON THE ROLE OF THE SCATTERED WAVE WITH MOMENTUM  $L = 1$  FOR 1S-2P  
TRANSITIONS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 12, 308, (1962)
- 98 HARRIES W  
UBER DEN ENERGIEVERLUST LANGSAMER ELEKTROEN BEIM ZUSAMMENSTOSS MIT  
MOLEKULEN  
Z PHYSIK, VOL 42, 26, (1927)
- 99 MOLTSMARK J  
DER RAMSAUEREFFEKT IM ARGON  
Z PHYSIK, VOL 55, 437, (1929)
- 100 ORNSTEIN I S, ELENBAAS W  
OPTISCHE BESTIMMUNG DES WIRKUNGSQUERSCHNITTS VON HE-ATOMEN GEGENUBER  
ELEKTROEN  
Z PHYSIK, VOL 59, 306, (1930)
- 101 VELDRÉ V, PETERKOP R K  
CALCULATION OF THE DISTORTION OF THE INCIDENT S-WAVE IN THE  
IONIZATION OF THE HYDROGEN ATOM BY ELECTRONS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 13, 257, (1962)
- 102 LATYSCHIEFF G D, LEIPUNSKI A  
STOSS ZWEITER ART ZWISCHEN ELEKTROEN UND ANGEREGTEN  
QUECKSILBERATOMEN  
Z PHYSIK, VOL 65, 111, (1930)
- 103 MCCOY G C, MILFORD S W  
BORN CROSS SECTIONS FOR INELASTIC SCATTERING OF ELECTRONS BY  
HYDROGEN ATOMS. IV. APPROXIMATE VALUES FOR ALLOWED TRANSITIONS UP TO  
100 eV  
PHYS REV, VOL 130, 206, (1963)
- 104 MOLTSMARK J  
DER WIRKUNGSQUERSCHNITT DES KRYPTONS FUR LANGSAME ELEKTROEN  
Z PHYSIK, VOL 66, 49, (1930)
- 105 LARCHE K  
DIE LEUCHTAUSBEUTE IN ABHANGIGKEIT VON DER VOLTGESCHWINDIGKEIT DER  
ELEKTROEN UND DIE RELATIVEN INTENSITATEN VON CADMIUM- UND  
ZINKLINIEN BEI ANREGUNG DURCH ELEKTROENSTOSS  
Z PHYSIK, VOL 67, 440, (1931)
- 106 ALLIS W P, MORSE P M  
THEORIE DER STREUUNG LANGSAMER ELEKTROEN AN ATOMEN  
Z PHYSIK, VOL 70, 567, (1931)
- 107 MAGSTRUM H D  
IONIZATION BY ELECTRON IMPACT IN C O, N<sub>2</sub>, N O, AND O<sub>2</sub>  
REV MOD PHYS, VOL 23, 145, (1951)
- 108 THIEME O  
LICHTAUSBEUTE IM HELIUM, QUECKSILBER UND STICKSTOFFSPEKTRUM BEI  
ANREGUNG DURCH ELEKTROENSTOSS  
Z PHYSIK, VOL 78, 412, (1932)
- 109 BUNYAN P J  
THE POLARIZATION BY MERCURY OF 1 TO 2 KEV ELECTRONS  
PROC PHYS SOC LONDON, VOL 81, 816, (1963)
- 110 ORNSTEIN I S, LINDEMAN H  
DIE ANREGUNGSFUNKTIONEN DES ATOMAREN WASSERSTOFFS  
Z PHYSIK, VOL 80, 525, (1933)
- 111 HAFT G  
LICHTAUSBEUTEMESSUNGEN IM NATRIUMSPEKTRUM BEI ANREGUNG DURCH  
ELEKTROENSTOSS  
Z PHYSIK, VOL 82, 73, (1933)
- 112 ORNSTEIN I S, LINDEMAN H,  
OLDEMAN J  
DIE ANREGUNGSFUNKTION DER QUECKSILBERFRESONANZLINIE 2537  
Z PHYSIK, VOL 83, 171, (1933)
- 113 VOSS W  
BEDINGUNGEN FUR DAS AUFTRETEN DES RAMSAUEREFFEKTES  
Z PHYSIK, VOL 83, 581, (1933)
- 114 SEILER R  
QUANTITATIVE BESTIMMUNG DER ANREGUNGSFUNKTION EINIGER TERME DES  
QUECKSILBERSPEKTRUMS  
Z PHYSIK, VOL 82, 789, (1933)
- 115 FISCHER O  
MESSUNG DER LICHTAUSBEUTE IM ARGON- UND QUECKSILBERSPEKTRUM BEI  
ANREGUNG DURCH ELEKTROENSTOSS  
Z PHYSIK, VOL 86, 606, (1933)

- 116 FUCHTBAUER C, SCHULZ P, BRANDT A F  
VERSCHIEBUNG VON HOHEN SERIENLINIEN DES NATRIUMS UND KALIUMS DURCH FREMGASE. BERECHNUNG DER WIRKUNGSQUERSCHNITTE VON EDELGASEN GEGEN SEHR LANGSAME ELEKTROKEN  
Z PHYSIK, VOL 90, 603, (1936)
- 117 FUCHTBAUER C, BOSSLER F  
VERSCHIEBUNG UND VERBREITERUNG HOHER SERIENGLIEDER DES CASIUMS DURCH QUECKSILBER UND NEON. VERBREITERUNG VON KALIUM DURCH ARGON  
Z PHYSIK, VOL 93, 648, (1935)
- 118 FUCHTBAUER C, REINHARS M J  
VERBREITERUNG UND VERSHIEBUNG DER LINIEN DES CASIUMSERIENENDES DURCH KRYPTON  
Z PHYSIK, VOL 95, 1, (1935)
- 119 MAIER-LEHNITZ H  
AUSBEUTEMESSUNGEN BEIM STOSS LANGSAMER ELEKTROKEN MIT EDELGASATOMEN  
Z PHYSIK, VOL 95, 499, (1935)
- 120 POULTNEY F C, WHIDDINGTON R  
SMALL ANGLE SCATTERING OF ELECTRONS IN HELIUM  
NATURE, VOL 133, 685, (1934)
- 121 STROMMEIER O  
LICHTAUSBEUTEN IM ELEKTROKENSTOSSLEUCHTEN DES THALLIUMDAMPFES  
Z PHYSIK, VOL 107, 409, (1937)
- 122 MILATZ J M W, WOUDEBERG J P M  
DETERMINATION OF ABSOLUTE EFFICIENCY FOR EXCITATION BY ELECTRON-IMPACT OF THE LINES  $\lambda_{5945}$ ,  $\lambda_{5142}$ ,  $\lambda_{334}$ , AND  $\lambda_{6402}$  OF NEON  
PHYSICA, VOL 7, 697, (1940)
- 123 DORRESTEIN R  
DIE AUSLOSUNG VON ELEKTROKEN AUS METALLEN DURCH METASTABILE ATOME ANGEWANDT AUF DIE MESSUNG VON ANREGUNGSFUNKTIONEN  
PHYSICA, VOL 9, 433, (1942)
- 124 DORRESTEIN R  
ANREGUNGSFUNKTIONEN METASTABILER ZUSTANDE IN HELIUM UND NEON, GEMESSEN MIT HILFE DER VON METASTABILEN ATOMEN VERURSACHTEN ELEKTROKENAUSLOSUNG AUS METALLEN  
PHYSICA, VOL 9, 447, (1942)
- 125 WOUDEBERG J P M, MILATZ J M W  
THE ELECTRONIC EXCITATION-FUNCTION OF THE METASTABLE 2 TRIPLET S LEVEL OF HELIUM  
PHYSICA, VOL 8, 871, (1941)
- 126 RUSCH H  
UBER DAS VERHALTEN DER GASATOME GEGENUBER LANGSAMEN ELEKTROKEN  
PHYSIK Z, VOL 26, 748, (1925)
- 127 HUANG S S  
THE ELASTIC SCATTERING OF ELECTRONS BY NEUTRAL ATOMS BY THE VARIATIONAL METHOD  
PHYS REV, VOL 76, 477, (1949)
- 128 PETERKOP R K  
THE ROLE OF EXCHANGE IN THE EXCITATION OF THE 2S AND 2P LEVELS OF HYDROGEN BY ELECTRONS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 12, 77, (1962)
- 129 RANSAUER C, KOLLATH R  
DIE WINKELVERTEILUNG BEI DER STREUUNG LANGSAMER ELEKTROKEN AN GASHOLEKULEN  
PHYSIK Z, VOL 32, 867, (1931)
- 130 SASAKI N, NAKAO T  
MOLEKULARE ORIENTIERUNG UND DIE DISSOZIATIONS-WAHRSCHEINLICHKEIT DES WASSERSTOFFMOLEKULS DURCH ELEKTROKENSTOSS. III.  
PROC IMP ACAD TOKYO, VOL 17, 75, (1941)
- 131 CHAMIN L M, PHELPS A V, BIONDI M A  
MEASUREMENT OF THE ATTACHMENT OF SLOW ELECTRONS IN OXYGEN  
PHYS REV LETTERS, VOL 2, 344, (1959)
- 132 MORGULIS N D, KORCHEVOI YU P  
MOBILITY AND SCATTERING CROSS SECTION OF ELECTRONS IN WEAKLY IONIZED CESIUM PLASMA  
SOVIET PHYS TECH PHYS ENGLISH TRANSL, VOL 7, 655, (1963)
- 133 FOX R E, CURRAN R K  
IONIZATION PROCESSES IN C CL<sub>4</sub> AND S F<sub>6</sub> BY ELECTRON BEAMS  
J CHEM PHYS, VOL 34, 1505, (1961)
- 134 BUCHDAHL R  
NEGATIVE ION FORMATION IN IODINE VAPOR BY ELECTRON IMPACTS  
J CHEM PHYS, VOL 9, 144, (1941)
- 135 SASAKI N, NAKAO T  
UBER DIE ANWANDIGKEIT DER IONISIERUNGSWAHRSCHEINLICHKEIT,  $\lambda_2 = h \cdot h_0 \cdot$  ELECTRON  $\cdot$  KIN ENERGIE, VON DEN MOLEKULORIENTIERUNG GEGEN DIE STOSSENDEN ELEKTROKEN  
PROC IMP ACAD TOKYO, VOL 11, 138, (1935)
- 136 MOTT N F  
THE QUANTUM THEORY OF ELECTRONIC SCATTERING BY HELIUM  
PROC CAMBRIDGE PHIL SOC, VOL 25, 384, (1929)
- 137 NICOLL F W  
THE INELASTIC SCATTERING OF SLOW ELECTRONS IN GASES. IV.  
PROC ROY SOC LONDON SER A, VOL 142, 647, (1933)

- 138 HASSEY M S W, BULLARD E C THE SCATTERING OF ELECTRONS BY NITROGEN MOLECULES  
PROC CAMBRIDGE PHIL SOC. VOL 29, 511, (1933)
- 139 HASSEY M S W, MOHR C B O THE DOUBLE EXCITATION OF HELIUM BY ELECTRON IMPACT  
PROC CAMBRIDGE PHIL SOC. VOL 31, 604, (1935)
- 140 BURHOP E M S THE INNER SHELL IONIZATION OF ATOMS BY ELECTRON IMPACT  
PROC CAMBRIDGE PHIL SOC. VOL 36, 43, (1940)
- 141 LOVERIDGE L E THE ABSOLUTE VALUE OF THE EXCITATION FUNCTIONS OF THE FIRST MEMBERS  
OF THE PRINCIPAL SERIES OF SODIUM AND POTASSIUM  
THESIS,  
UNIVERSITY OF CALIFORNIA, 1931, 30 PAGES
- 142 FABRIKANT V, CIRQ I PROBABILITY OF A STEPWISE EXCITATION OF MERCURY ATOMS  
COMPT REVD ACAD SCI URSS, VOL 16, 263, (1937)
- 143 TREFFTZ E THE CROSS-SECTION FOR IONIZATION OF  $(0)5^{\circ}$  BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 271, 379, (1963)
- 144 ARNOT F L DIFFRACTION OF ELECTRONS IN MERCURY VAPOUR  
NATURE, VOL 130, 438, (1932)
- 146 BATES D R, KINGSTON A E, RECOMBINATION BETWEEN ELECTRONS AND ATOMIC IONS, II, OPTICALLY THICK  
MCWHIRTER R M P PLASMAS  
PROC ROY SOC LONDON SER A, VOL 270, 155, (1962)
- 147 NEU M EINE ERWEITERUNG DER TOWNSENDSCHEN NAHERUNGSFORMEL FÜR DIE  
IONISIERUNG IN HOMOGENEN ELEKTRISCHEN FELD  
Z PHYSIK, VOL 152, 294, (1958)
- 148 DAMBUNG R, KARLE E M SCATTERING OF POSITRONS BY ATOMIC HYDROGEN  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 14, 165, (1963)
- 149 MIRLIN D N, PIKUS G E, DETERMINATION OF ELECTRON SCATTERING CROSS SECTION BY THE  
YUREV V G ELECTRICAL CONDUCTIVITY OF WEAKLY IONIZED GAS  
SOVIET PHYS TECH PHYS ENGLISH TRANSL, VOL 7, 559, (1962)
- 150 BRINK G IONIZATION OF ALKALI ATOMS BY ELECTRON BOMBARDMENT  
PHYS REV, VOL 127, 1204, (1962)
- 151 BURKE P G, SCHEY M M ELASTIC SCATTERING OF LOW-ENERGY ELECTRONS BY ATOMIC HYDROGEN  
PHYS REV, VOL 126, 147, (1962)
- 152 HANLE W ANREGUNGSFUNKTIONEN IM NEONSPEKTRUM  
Z PHYSIK, VOL 65, 512, (1930)
- 153 COOK C J, PETERSON J R DIRECT AND DISSOCIATIVE IONIZATION CROSS SECTIONS FOR ELECTRONS  
IN  $N_2$   
PHYS REV LETTERS, VOL 9, 164, (1962)
- 154 DAMBUNG R, PETERKOP R K EXCITATION OF HYDROGEN BY ELECTRON COLLISION ALLOWING FOR EXCHANGE  
AND  $1S-2S-2P$  STRONG COUPLING  
PROC PHYS SOC LONDON, VOL 80, 563, (1962)
- 155 SEATON M J THE IMPACT PARAMETER METHOD FOR ELECTRON EXCITATION OF OPTICALLY  
ALLOWED ATOMIC TRANSITIONS  
PROC PHYS SOC LONDON, VOL 79, 1105, (1962)
- 156 ARNOT F L, BAINES G O APPROXIMATE PHASES IN ELECTRON SCATTERING  
PROC ROY SOC LONDON SER A, VOL 146, 651, (1934)
- 157 JONES T J ABSORPTION COEFFICIENT OF SLOW ELECTRONS IN MERCURY VAPOR  
PHYS REV, VOL 32, 459, (1928)
- 158 HARNWELL A P ANGULAR SCATTERING OF ELECTRONS IN HELIUM, NEON, HYDROGEN AND  
NITROGEN  
PHYS REV, VOL 33, 559, (1929)
- 159 BAILEY V A, RUDD J B THE BEHAVIOUR OF ELECTRONS IN NITROUS OXIDE  
PHIL MAG, VOL 14, 1033, (1932)
- 160 GREEN M C THE EFFECT OF SMALL ANGLE SCATTERING ON THE ELECTRON ABSORPTION  
COEFFICIENT  
PHYS REV, VOL 36, 239, (1930)
- 161 PALMER R B THE EFFECT OF RESOLVING POWER ON MEASUREMENTS OF THE ABSORPTION  
COEFFICIENT OF ELECTRONS IN GASES  
PHYS REV, VOL 37, 78, (1931)



- 162 BURKE P G, BURKE V M,  
PERCIVAL I C, MCCARRULL R  
ELECTRON SCATTERING BY ATOMIC HYDROGEN IN THE 1S, 2S, OR 2P  
STATE. I.  
PROC PHYS SOC LONDON, VOL 80, 413, (1962)
- 163 PEARSON J M, ARNGUIST W N  
THE ANGULAR DISTRIBUTION OF ELECTRONS SCATTERED BY MERCURY VAPOR  
PHYS REV, VOL 37, 970, (1931)
- 164 GASSE A P  
MAGNETIC DEFLECTION METHOD FOR ANGULAR DISTRIBUTION OF ELECTRONS  
SCATTERED BY GAS MOLECULES  
PHYS REV, VOL 44, 808, (1933)
- 165 HUGHES A L, MCHILLEN J M,  
WEBB G M  
ELASTIC ELECTRON SCATTERING IN HELIUM  
PHYS REV, VOL 41, 154, (1932)
- 166 MUSCHLITZ E E  
FORMATION OF NEGATIVE IONS IN GASES BY SECONDARY COLLISION PROCESSES  
J APPL PHYS, VOL 28, 1414, (1957)
- 167 RANDOLPH P L, GEBALLE R  
A MASS SPECTROMETRIC STUDY OF NEGATIVE ION FORMING REACTIONS  
IN OXYGEN  
TECHNICAL REPORT NO. 6, UNIVERSITY OF WASHINGTON, DEPARTMENT OF  
PHYSICS (PREPARED UNDER OFFICE OF ORDNANCE RESEARCH CONTRACT  
DA-04-200-ORD-664) 1958, 40 PAGES
- 168 SARAPH H, SEATON M J  
AN ITERATION-VARIATION METHOD FOR ATOMIC SCATTERING PROBLEMS  
MAGC PHYS SOC LONDON, VOL 80, 1057, (1962)
- 169 BREHM J J  
MODEL WAVE FUNCTION STUDY OF NEGATIVE ION PHOTODETACHMENT IN OXYGEN  
J APPL PHYS, VOL 30, 324, (1959)
- 170 BAERWALD H  
ELEKTROENREFLEXION IN GASEN. (UNTERSUCHUNG VON WASSERSTOFF)  
ANN PHYSIK, VOL 76, 829, (1925)
- 171 ZA'ANN E  
UEBER DIE DIFFUSION LANGSAMER ELEKTROEN (2-30 VOLT) IN WASSERSTOFF  
UND ARGON  
ANN PHYSIK, VOL 84, 20, (1927)
- 172 BEUTHE H  
UEBER DAS VERHALTEN VON LANGSAMEN ELEKTROEN IN QUECKSILBERDAMPF  
ANN PHYSIK, VOL 84, 949, (1928)
- 173 VAN VOORHIS S N  
SMALL-ANGLE INELASTIC SCATTERING OF ELECTRONS IN HELIUM, HYDROGEN  
AND MERCURY  
PHYS REV, VOL 40, 440, (1934)
- 174 KOLLATH R  
UEBER DIE SENKRECHTE ABLENKUNG LANGSAMER ELEKTROEN AN GASMOLEKULEN  
ANN PHYSIK, VOL 87, 250, (1928)
- 175 GAENTNER W  
WIRKUNGSQUERSCHNITTMESSUNGEN AN ARGON UND WASSERSTOFF GEGENUEBER  
ELEKTROEN VON 0.2-6 VOLT  
ANN PHYSIK, VOL 8, 135, (1931)
- 176 JONGENIUS H H  
MEASUREMENTS OF OPTICAL EXCITATION FUNCTIONS OF THE MERCURY ATOM  
(EXCITATION BY ELECTRONS)  
THESIS,  
UNIVERSITY OF UTRECHT, 1961, 87 PAGES
- 177 HAMMEN J M, THOMAS J J,  
AUDREY U B  
RESEARCH ON THE VOLUME RECOMBINATION OF CESIUM IONS  
TRACOM TECHNICAL REPORT 63-73, RCA LABORATORIES, DAVID SARNOFF  
RESEARCH CENTER, PRINCETON, NEW JERSEY, 1963, 23 PAGES
- 178 NIKKISHI R, SPONER H  
UEBER DIE FREIE WERLANGE LANGSAMER ELEKTROEN IN GASEN  
Z PHYSIK, VOL 15, 309, (1923)
- 179 HANLE W  
DIE ANREGUNGSFUNKTION FUR QUECKSILBERRESONANZLINIE 7837  
Z PHYSIK, VOL 54, 848, (1929)
- 180 NIKKISHI R  
UEBER DIE FREIE WERLANGE LANGSAMER ELEKTROEN IN H2- UND CO-DAMPF  
Z PHYSIK, VOL 16, 258, (1923)
- 181 FROST L S, PHELPS A V  
ROTATIONAL EXCITATION AND MOMENTUM TRANSFER CROSS SECTIONS FOR  
ELECTRONS IN H2 AND N2 FROM TRANSPORT COEFFICIENTS  
PHYS REV, VOL 127, 1021, (1962)
- 182 CHEN C L, RAETHER H  
COLLISION CROSS SECTION OF SLOW ELECTRONS AND IONS WITH CESIUM ATOMS  
PHYS REV, VOL 129, 2679, (1962)
- 183 ELBASSEN W  
ZUR THEORIE DER STOSSPROZESSE BEI WASSERSTOFF  
Z PHYSIK, VOL 45, 522, (1927)
- 184 HASSEY H S O  
THE EXCITATION OF MOLECULAR VIBRATION BY IMPACT OF SLOW ELECTRONS  
TRANS FARADAY SOC, VOL 11, 950, (1915)

- 185 MOLTSMARK J ZUR THEORIE DER STREUUNG VON LANGSAMEN ELEKTRONEN  
Z PHYSIK, VOL 48, 231, (1928)
- 186 RAMSAUER C UBER DEN WIRKUNGSQUERSCHNITT DER EDELGASMOLEKULE GEGENUEBER LANGSAMEN  
ELEKTRONEN  
JAHRS RADIOAKT U ELEKTRONIK, VOL 19, 345, (1923)
- 187 BERMAN A ELASTIC AND INELASTIC SCATTERING OF ELECTRONS BY ARGON AND NEON  
THESIS,  
OHIO STATE UNIVERSITY, 1949, 88 PAGES
- 188 BERNSTEIN M J ELECTRON DRIFT AND DIFFUSION MEASUREMENTS IN H<sub>2</sub> AND O<sub>2</sub> WITH CROSSED  
ELECTRIC AND STRONG MAGNETIC FIELDS  
PHYS REV, VOL 127, 335, (1962)
- 189 NISBET J S, QUINN T P THE RECOMBINATION COEFFICIENT OF THE NIGHTTIME F LAYER  
J GEOPHYS RES, VOL 68, 1831, (1963)
- 190 EDMISTEN W C A STUDY OF THE ELASTIC AND INELASTIC SCATTERING OF LOW SPEED  
ELECTRONS BY METHANE AND ETHANE  
THESIS,  
OHIO STATE UNIVERSITY, 1949, 98 PAGES
- 191 ARNOT F L ELECTRON SCATTERING IN MERCURY VAPOUR  
PROC ROY SOC LONDON SER A, VOL 125, 660, (1929)
- 192 FRANCIS S A THE EXCITATION OF POLYATOMIC MOLECULES BY ELECTRON IMPACT  
THESIS,  
OHIO STATE UNIVERSITY, 1947, 175 PAGES
- 193 WERNER S ELECTRON SCATTERING IN HELIUM  
PROC ROY SOC LONDON SER A, VOL 134, 202, (1931)
- 194 MASSEY H S W, MOHR C B O THE COLLISION OF ELECTRONS WITH MOLECULES  
PROC ROY SOC LONDON SER A, VOL 135, 250, (1932)
- 195 TOWNSEND J S, BAILEY V A THE MOTION OF ELECTRONS IN GASES  
PHIL MAG, VOL 42, 874, (1921)
- 197 TOWNSEND J S, BAILEY V A THE MOTION OF ELECTRONS IN ARGON  
PHIL MAG, VOL 43, 593, (1922)
- 198 SKINNER M F THE MOTION OF ELECTRONS IN CARBON DIOXIDE  
PHIL MAG, VOL 44, 994, (1922)
- 199 TOWNSEND J S, BAILEY V A THE MOTION OF ELECTRONS IN ARGON AND HYDROGEN  
PHIL MAG, VOL 44, 1633, (1922)
- 200 SKINNER M F, WHITE J V THE MOTION OF ELECTRONS IN CARBON MONOXIDE, NITROUS OXIDE, AND  
NITRIC OXIDE  
PHIL MAG, VOL 46, 630, (1923)
- 201 TOWNSEND J S, BAILEY V A MOTION OF ELECTRONS IN HELIUM  
PHIL MAG, VOL 46, 697, (1923)
- 202 YAVORSKY B ON THE PROBABILITIES OF THE COLLISIONS OF THE FIRST AND SECOND  
KINDS BETWEEN ATOMS OF MERCURY AND FREE ELECTRONS  
J PHYS USSR, VOL 10, 476, (1946)
- 203 BANNON J, BROJE M L THE MOTIONS OF ELECTRONS IN ETHYLENE  
PHIL MAG, VOL 6, 817, (1928)
- 204 TENKIN A POSITRON-HYDROGEN SCATTERING  
PROC PHYS SOC LONDON, VOL 60, 1277, (1948)
- 205 MADEISHI Y ON THE MEASUREMENTS OF LIFETIMES, EXCITATION FUNCTIONS, DENSITIES,  
TOTAL CROSS SECTIONS, AND POLARIZATION RATIOS OF THE METASTABLE  
STATE OF THE NEON ATOM UNDER ELECTRON IMPACT  
THESIS, UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA, 1943, 87  
PAGES, UNIVERSITY MICROFILMS, INC, ANN ARBOR, MICHIGAN, NO. 33-4887
- 206 TIETZ T, WOJCZAK L FORMULA FOR CALCULATION OF PHASE SHIFTS IN CASE OF THOMAS-FERMI AND  
HARTREE POTENTIALS  
SOVIET PHYS JETP (ENGLISH TRANSL), VOL 10, 63, 663
- 207 CHEN J C Y THEORY OF ELECTRON CAPTURE BY MOLECULES, DISSOCIATIVE ATTACHMENT  
PHYS REV, VOL 180, 862, (1962)
- 208 YAMAMOTO Y ELASTIC COLLISION CROSS SECTION OF NEUTRON ATOM FOR SLOW ELECTRON  
SOVIET PHYS JETP, VOL 2, 33, (1947)

- 209 GLOCKLER S  
THE BEHAVIOR OF LOW VELOCITY ELECTRONS IN METHANE GAS  
PROC NATL ACAD SCI US, VOL 20, 195, (1924)
- 210 INOKUTI M  
IONIZATION OF THE METHANE MOLECULE BY ELECTRON IMPACT  
J CHEM PHYS, VOL 37, 2387, (1962)
- 211 MCFADOEN Y  
THE IONIZATION OF MERCURY VAPOUR BY SLOW ELECTRONS  
PHIL MAG, VOL 37, 838, (1946)
- 213 STEVENSON D, HIPPLE J A  
IONIZATION OF ARGON AND NEON BY ELECTRON IMPACT  
PHYS REV, VOL 62, 237, (1942)
- 214 MAGSTHUM M D, TATE J T  
IONIZATION AND DISSOCIATION OF DIATOMIC MOLECULES BY ELECTRON IMPACT  
PHYS REV, VOL 59, 354, (1941)
- 215 BELL M E  
THE PROBABILITY OF IONIZATION OF MERCURY ATOMS BY COLLISION WITH  
LOW VELOCITY ELECTRONS  
PHYS REV, VOL 55, 201, (1939)
- 216 TATE J T, SMITH P T  
IONIZATION POTENTIALS AND PROBABILITIES FOR THE FORMATION OF  
MULTIPLY CHARGED IONS IN THE ALKALI VAPORS AND IN KRYPTON AND XENON  
PHYS REV, VOL 46, 773, (1934)
- 218 ENGELHARDT A G, PHELPS A V,  
RISK C B  
DETERMINATION OF MOMENTUM TRANSFER AND INELASTIC COLLISION CROSS  
SECTIONS FOR ELECTRONS IN NITROGEN USING TRANSPORT COEFFICIENTS  
PHYS REV, VOL 135, A1566, (1964)
- 219 JORDAN E D, BRODE R B  
ELASTIC SCATTERING OF ELECTRONS BY MERCURY ATOMS  
PHYS REV, VOL 43, 112, (1933)
- 220 KAMENETSKII V D  
THE COLLISION OF SLOW ELECTRONS WITH HYDROGEN ATOMS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 12, 366, (1962)
- 221 FEENBERG E  
THE SCATTERING OF SLOW ELECTRONS, PART II  
PHYS REV, VOL 42, 17, (1932)
- 222 BOGDANOVA I, GEITSI I I  
USE OF MODULATED ELECTRON BEAMS IN THE STUDY OF THE OPTICAL  
EXCITATION FUNCTIONS OF ATOMS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 14, 312, (1963)
- 223 SMIT J A  
ON THE ANGULAR DISTRIBUTION OF THE LIGHT-EMISSION, ARISING FROM A  
DIRECTED STREAM OF ELECTRONS IN A GAS  
PHYSICA, VOL 2, 104, (1935)
- 224 SMITH P T  
THE IONIZATION OF MERCURY VAPOR BY ELECTRON IMPACT  
PHYS REV, VOL 37, 808, (1931)
- 225 SMITH P T  
THE IONIZATION OF HELIUM, NEON, AND ARGON BY ELECTRON IMPACT  
PHYS REV, VOL 36, 1293, (1930)
- 226 MICHELS W C  
THE OPTICAL EXCITATION FUNCTION OF HELIUM  
PHYS REV, VOL 36, 1362, (1930)
- 227 LAMB W E, HAIMAN T H  
MEASUREMENT OF THE FINE STRUCTURE SEPARATION 3 TRIPLET P<sub>1</sub> - 3  
DOUBLET P<sub>2</sub> FOR THE HELIUM ATOM  
PHYS REV, VOL 105, 573, (1957)
- 228 BLEAKNEY W  
PROBABILITY AND CRITICAL POTENTIALS FOR THE FORMATION OF MULTIPLY  
CHARGED IONS IN HG VAPOR BY ELECTRON IMPACT  
PHYS REV, VOL 35, 139, (1930)
- 229 OSTENSEN F  
A NEW METHOD FOR THE STUDY OF VOLTAGE-INTENSITY RELATIONS AND ITS  
APPLICATION TO THE MERCURY 2547 ANGSTROM LINE  
PHYS REV, VOL 34, 1352, (1929)
- 230 HARNWELL G P  
ELECTRON SCATTERING IN ATOMIC AND MOLECULAR HYDROGEN  
PHYS REV, VOL 34, 661, (1929)
- 231 BRATTAIN W  
EFFICIENCY OF EXCITATION BY ELECTRON IMPACT AND ANOMALOUS SCATTERING  
IN MERCURY VAPOR  
PHYS REV, VOL 34, 474, (1929)
- 232 BRASEFIELD C J  
THE DENSITIES OF HYDROGEN SPECTRAL LINES AS A FUNCTION OF THE  
ELECTRONIC VELOCITY OF EXCITATION  
PHYS REV, VOL 34, 431, (1929)
- 233 DOUGAL A A, GOLDSTEIN L  
ENERGY EXCHANGE BETWEEN ELECTRON AND ION GASES THROUGH COULOMB  
COLLISIONS IN PLASMAS  
PHYS REV, VOL 109, 619, (1958)

- 234 MASSEY H S W THEORY OF THE SCATTERING OF SLOW ELECTRONS  
REV MOD PHYS, VOL 28, 199, (1956)
- 235 BLOCKLER G THE EFFICIENCY OF ELECTRON IMPACT LEADING TO RESONANCE IN HELIUM  
PHYS REV, VOL 33, 175, (1929)
- 240 VARNERIN L J ELECTRON RECOMBINATION AND COLLISION CROSS-SECTION MEASUREMENTS IN HYDROGEN  
PHYS REV, VOL 84, 563, (1951)
- 241 FOWLER R G, ATKINSON W R ELECTRON RECOMBINATION IN ATOMIC HYDROGEN  
PHYS REV, VOL 113, 1268, (1959)
- 242 MORRISON J D, NICHOLSON A J C PROBABILITY OF DOUBLE IONIZATION BY ELECTRON IMPACT FOR NEON, ARGON, AND XENON  
J CHEM PHYS, VOL 31, 1370, (1959)
- 243 BATES D R, BUCKINGHAM R A, MASSEY H S W, UNWIN J J DISSOCIATION, RECOMBINATION AND ATTACHMENT PROCESSES IN THE UPPER ATMOSPHERE. II. THE RATE OF RECOMBINATION  
PROC ROY SOC LONDON SER A, VOL 170, 322, (1939)
- 244 GELTMAN S VARIATIONAL TREATMENT OF ELECTRON-HYDROGEN ATOM ELASTIC SCATTERING  
PHYS REV, VOL 119, 1283, (1960)
- 245 ARNOT F L THE DIFFRACTION OF ELECTRONS IN MERCURY VAPOUR  
PROC ROY SOC LONDON SER A, VOL 140, 334, (1933)
- 247 YAMANOUCHI T RADIATIVE DETACHMENT AND ATTACHMENT OF NEGATIVE OXYGEN ION  
PROC PHYS MATH SOC JAPAN, VOL 22, 569, (1940)
- 248 YAMANOUCHI T, INUI T, AMEMIYA A EXCITATION OF METASTABLE STATES OF OXYGEN ATOM BY ELECTRON IMPACT  
PROC PHYS MATH SOC JAPAN, VOL 22, 847, (1940)
- 249 CHEN C L, GOLDSTEIN L, LEIBY C C ELECTRON TEMPERATURE DEPENDENCE OF THE RECOMBINATION COEFFICIENTS IN PURE HELIUM  
PHYS REV, VOL 121, 1391, (1961)
- 251 MASSEY H S W THEORY OF THE ELASTIC SCATTERING OF ELECTRONS IN MOLECULAR HYDROGEN  
PROC ROY SOC LONDON SER A, VOL 129, 616, (1930)
- 253 DYMOND E G, WATSON E E ELECTRON SCATTERING IN HELIUM  
PROC ROY SOC LONDON SER A, VOL 122, 571, (1929)
- 254 RICHARDSON J M ELECTRON REMOVAL IN KRYPTON AFTERGLOWS  
PHYS REV, VOL 68, 895, (1952)
- 255 SMYTH M FURTHER STUDIES IN IONIZATION, HYDROGEN AND OXYGEN  
PROC ROY SOC LONDON SER A, VOL 105, 116, (1924)
- 256 DEVORE R V ABSORPTION AND BREMSSTRAHLUNG CROSS SECTIONS OF NITROGEN FOR SLOW ELECTRONS  
PHYS REV, VOL 136, A666, (1964)
- 258 KOLOS W, PECUL K ON THE INFLUENCE OF CORRELATION OF THE ATOMIC ELECTRONS ON THE ELASTIC ELECTRON SCATTERING BY HELIUM ATOMS  
ANN PHYS N Y, VOL 14, 201, (1961)
- 259 BRÜCHE E WIRKUNGSQUERSCHNITT UND MOLEKÜLBÄU  
ANN PHYSIK, VOL 83, 1065, (1927)
- 260 ENGELHARDT A G, PHELPS A V ELASTIC AND INELASTIC COLLISION CROSS SECTIONS IN HYDROGEN AND DEUTERIUM FROM TRANSPORT COEFFICIENTS  
PHYS REV, VOL 131, 2115, (1963)
- 261 HARRISON M F A, DOLDER K T, THOMANN P C A MEASUREMENT OF THE CROSS SECTION FOR THE IONIZATION OF  $He^+$  TO  $(He)^{2+}$  BY ELECTRONIC IMPACT  
PROC PHYS SOC LONDON, VOL 82, 368, (1963)
- 262 SCHAFFERNICHT W DIE OPTISCHEN ANREGUNGSFUNKTIONEN DER QUECKSILBERLINIEN  
Z PHYSIK, VOL 62, 106, (1930)
- 263 HANLE W MESSUNG VON ANREGUNGSFUNKTIONEN IM HELIUMSPEKTRUM  
Z PHYSIK, VOL 86, 94, (1929)
- 264 DOLDER K T, HARRISON M F A, THOMANN P C A MEASUREMENT OF THE IONIZATION CROSS-SECTION OF  $He^+$  TO  $(He)^{2+}$  BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 274, 546, (1963)
- 265 HEBB M, MENZEL D H PHYSICAL PROCESSES IN GASEOUS NEBULAE X. COLLISIONAL EXCITATION OF NEBULIUM  
ASTROPHYS J, VOL 92, 408, (1940)

- 267 DULLAND, E. C., MASSEY, H. S. G. REMARKS ON THE SCATTERING OF ELECTRONS BY ATOMIC FIELDS  
PROC CAMBRIDGE PHIL SOC. VOL 26, 556, (1930)
- 268 MILATZ, J. H. W., ORNSTEIN, L. S. THE ELECTRONIC EXCITATION-FUNCTION OF THE METASTABLE 5S LEVEL OF NEON  
PHYSICA. VOL 2, 355, (1935)
- 269 ORNSTEIN, L. S., LINDENMAN, H., VRELSHIJK, J. A. INTENSITÄTSMESSUNGEN IN DER FEINSTRUKTUR DER BALMERLINIE H-ALPHA  
PHYSICA. VOL 2, 541, (1935)
- 270 KRUITHOFF, A., ORNSTEIN, L. S. ANREGUNG EINIGER SPEKTRALLINIEN DES WASSERSTOFFMOLEKÜLS DURCH ELEKTRONENSTOSS  
PHYSICA. VOL 2, 611, (1935)
- 271 FOX, R. E., WICKHAM, W. H. STUDY OF CARBON MONOXIDE, NITROGEN, PROPYLENE, AND BENZENE IONIZATION PROBABILITY CURVES NEAR THRESHOLD  
J CHEM PHYS. VOL 22, 2059, (1954)
- 272 YAVORSKY, B. STEPPED EXCITATION OF MERCURY BY ELECTRONIC IMPACT  
COMPT REND ACAD SCI URSS. VOL 48, 175, (1945)
- 273 ALLEN, H. W. ELECTRON TEMPERATURES AND MOBILITIES IN THE RARE GASES  
PHYS REV. VOL 52, 707, (1937)
- 274 GOLMAN, P. D., GOLDSTEIN, L. COLLISIONAL PROCESSES IN HELIUM PLASMAS AT CRYOGENIC TEMPERATURES (IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P. HUBERT AND E. CREMIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 1, 1, 1963
- 275 FABRIKANT, V. ON THE PROBABILITY OF EXCITATION OF A POTASSIUM ATOM  
COMPT REND ACAD SCI URSS. VOL 25, 663, (1939)
- 276 AKERIS, R. ELASTIC SCATTERING OF ELECTRONS BY HYDROGEN ATOMS IN THE IMPULSE APPROXIMATION (IN ABSTRACTS OF) THE SECOND INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (BOULDER, COLORADO, 12-15 JUNE 1961) W. A. BENJAMIN, INC, NEW YORK, PAGE 147, 1961
- 277 GOLDSTEIN, L. THEORIE QUANTIQUE DES CHOC D'ELECTRONS INELASTIQUES  
ANN PHYS PARIS, VOL 19, 305, (1933)
- 278 DANBUNG, R., PETERKOP, R. K. STRONG BOND AND EXCHANGE TAKEN INTO ACCOUNT IN THE COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS  
OPT SPECTRY USSR ENGLISH TRANSL. VOL 13, 338, (1962)
- 279 MOHLER, F. L. COLLISIONS OF THE FIRST AND SECOND KIND IN THE POSITIVE COLUMN OF A CAESIUM DISCHARGE  
J RES NATL BUR STD. VOL 6, 493, (1937)
- 280 FITE, W. L., BRACKMANN, R. T. ELECTRON COLLISIONS WITH ATOMIC AND MOLECULAR OXYGEN (IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P. HUBERT AND E. CREMIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 1, 21, 1963
- 281 YAVORSKY, R. ON CUMULATIVE EXCITATION OF HYDROGEN AND HELIUM BY ELECTRONIC IMPACT  
COMPT REND ACAD SCI URSS. VOL 43, 151, (1944)
- 282 YAVORSKY, B. STEPPED IONIZATION OF HYDROGEN BY ELECTRONIC IMPACT  
COMPT REND ACAD SCI URSS. VOL 49, 250, (1945)
- 283 FIQUET-FAYARD, F., ZIESEL, J. P. FORMATION D'IONS MULTIPLEMENT CHARGES PAR EFFET AUGER DANS QUELQUES VAPEURS MONOATOMIQUES (IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P. HUBERT AND E. CREMIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 1, 37, 1963
- 284 MASSEY, H. S. G., MOHR, C. H. O. THE COLLISION OF SLOW ELECTRONS WITH ATOMS. II. GENERAL THEORY AND INELASTIC COLLISIONS  
PROC ROY SOC LONDON SER A. VOL 139, 187, (1933)
- 287 CHANDRASEKHAR, S., BREEN, F. H. THE MOTION OF AN ELECTRON IN THE HARTREE FIELD OF A HYDROGEN ATOM  
ASTROPHYS J. VOL 103, 41, (1946)
- 288 HERRMANN, O. INTENSITÄTSMESSUNGEN IM NEON- UND ARGONSPEKTRUM BEI ANREGUNG DURCH ELEKTRONENSTOSS  
ANN PHYSIK, VOL 25, 143, (1936)
- 289 FUHRMANN, W. MESSUNG VON ANREGUNGSFUNKTIONEN HOCHSIEDENDER METALLE BEI ANREGUNG DURCH ELEKTRONENSTOSS  
ANN PHYSIK, VOL 34, 625, (1939)

- 290 CHRISTOPH W  
 UBER DIE ABSOLUTE AUSBEUTE DER NA-D-LINIEN BEI ANREGUNG DURCH  
 ELEKTROSTOSS  
 ANN PHYSIK, VOL 23, 51, (1935)
- 292 ENGELHARDY A G, PHELPS A V  
 TRANSPORT COEFFICIENTS AND CROSS SECTIONS IN ARGON AND  
 HYDROGEN-ARGON MIXTURES  
 PHYS REV, VOL 133, A375, (1964)
- 293 PRIESTLY W, WHIDDINGTON R  
 NOTE ON FURTHER EXPERIMENTS ON THE DOUBLY-EXCITED HELIUM ATOM  
 PROC LEEDS PHIL LIT SOC SCI SECT, VOL 3, 81, (1935)
- 294 NIIRA K  
 ON THE EXCITATION OF H<sub>2</sub>O MOLECULE BY IMPACT OF FAST ELECTRON  
 J PHYS SOC JAPAN, VOL 4, 230, (1949)
- 295 GILLIE G  
 THE HYDROGEN EMISSION IN GASEOUS NEBULAE  
 MONTHLY NOTICES ROY ASTRON SOC, VOL 92, 820, (1932)
- 296 GAILLITIS M, DAMBURG R  
 THE INFLUENCE OF CLOSE COUPLING ON THE THRESHOLD BEHAVIOUR OF CROSS  
 SECTIONS OF ELECTRON-HYDROGEN SCATTERING  
 PROC PHYS SOC LONDON, VOL 82, 192, (1963)
- 297 HUANG K  
 THE CONTINUOUS ABSORPTION OF LIGHT BY NEGATIVE SODIUM IONS  
 ASTROPHYS J, VOL 101, 196, (1945)
- 298 SJOGREN H  
 SIMULTANEOUS MEASUREMENT OF IONIZATION EFFICIENCY CURVES FOR  
 POSITIVE AND NEGATIVE IONS  
 (IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION  
 PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P HUBERT AND  
 E CREMIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 1, 49, 1963
- 299 SCHULZ G J  
 RECENT STUDIES OF VIBRATIONAL EXCITATION OF N<sub>2</sub> BY ELECTRON IMPACT  
 (IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION  
 PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P HUBERT AND  
 E CREMIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 1, 41, 1963
- 300 SCHULZ G J  
 RESONANCES IN THE ELASTIC SCATTERING OF ELECTRONS ON ATOMS AND  
 MOLECULES  
 (IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
 NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 124, 1964.  
 PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
 ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 301 O'MALLEY T F, ROSENBERG L,  
 SPRUCH L  
 LOW-ENERGY SCATTERING OF A CHARGED PARTICLE BY A NEUTRAL POLARIZABLE  
 SYSTEM  
 PHYS REV, VOL 125, 1300, (1962)
- 302 FANO U  
 EFFECTS OF CONFIGURATION INTERACTION ON INTENSITIES AND PHASE SHIFTS  
 PHYS REV, VOL 124, 1866, (1961)
- 303 RIEDE O  
 ANREGUNGS- UND IONISIERUNGSFUNKTIONEN BEIM STOSS SCHNELLER  
 ELEKTROEN  
 Z PHYSIK, VOL 137, 313, (1956)
- 304 HANLE W, RIEDE O  
 ANREGUNGS- UND IONISIERUNGSFUNKTIONEN BEIM STOSS SCHNELLER  
 ELEKTROEN  
 Z PHYSIK, VOL 133, 537, (1952)
- 305 MAECKER M, PETERS T,  
 SCHENK M  
 IONEN- UND ATOMQUERSCHNITTE IN PLASMA VERSCHIEDENER GASE  
 Z PHYSIK, VOL 140, 119, (1955)
- 306 ANDERSON J M, GOLDSTEIN L  
 INTERACTION OF ELECTROMAGNETIC WAVES OF RADIO-FREQUENCY IN  
 ISOTHERMAL PLASMAS. COLLISION CROSS SECTION OF HELIUM ATOMS AND  
 IONS FOR ELECTRONS.  
 PHYS REV, VOL 100, 1037, (1955)
- 307 STAUFFER A D, MCDOWELL M R C  
 IONIZATION OF EXCITED STATES OF HYDROGEN BY ELECTRON IMPACT  
 (IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION  
 PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P HUBERT AND  
 E CREMIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 1, 9, 1963
- 308 KUYATT C F, SIMPSON J A  
 INELASTIC ELECTRON SCATTERING FROM RARE GASES. DETERMINATION OF  
 OSCILLATOR STRENGTHS IN THE CONTINUUM  
 (IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
 NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 101, 1964.  
 PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS  
 OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 310 FOX R E, HICKAM W M,  
 KJELDAAS T  
 IONIZATION PROBABILITY CURVES FOR KRYPTON AND XENON NEAR THRESHOLD  
 PHYS REV, VOL 89, 555, (1953)
- 311 BECKER P M, DAHLER J S  
 DOUBLE EXCITATION OF HELIUM BY ELECTRON IMPACT  
 PHYS REV, VOL 130, A73, (1964)

- 312 PHELPS A V, FUNDINGSLAND O T, BROWN S C MICROWAVE DETERMINATION OF THE PROBABILITY OF COLLISION OF SLOW ELECTRONS IN GASES  
PHYS REV, VOL 84, 559, (1951)
- 313 HICKAM W M IONIZATION PROBABILITY CURVES NEAR THRESHOLD FOR ZN, CD, AND HG  
PHYS REV, VOL 95, 703, (1954)
- 314 GOULD L, BROWN S C MICROWAVE DETERMINATION OF THE PROBABILITY OF COLLISION OF ELECTRONS IN HELIUM  
PHYS REV, VOL 95, 897, (1954)
- 315 JONGERUS H M, SMIT J A, VAN EDMOND W MEASUREMENT AND ANALYSIS OF THE OPTICAL EXCITATION FUNCTION OF THE 2937 ANGSTROM MERCURY LINE  
PHYSICA, VOL 22, 845, (1956)
- 316 ANDERSON J M, GOLDSTEIN L MOMENTUM TRANSFER CROSS SECTION AND FRACTIONAL ENERGY LOSS IN THE COLLISIONS OF SLOW ELECTRONS WITH NITROGEN MOLECULES  
PHYS REV, VOL 102, 388, (1956)
- 317 ANDERSON J M, GOLDSTEIN L VARIATION WITH ELECTRON ENERGY OF THE COLLISION CROSS SECTION OF HELIUM FOR SLOW ELECTRONS  
PHYS REV, VOL 102, 933, (1956)
- 318 SCHULZ G J, FOX R E EXCITATION OF METASTABLE LEVELS IN HELIUM NEAR THRESHOLD  
PHYS REV, VOL 106, 1179, (1957)
- 319 SCHULZ G J MEASUREMENT OF ATOMIC AND MOLECULAR EXCITATION BY A TRAPPED-ELECTRON METHOD  
PHYS REV, VOL 112, 150, (1958)
- 320 FITE W L, BRACKMANN R T COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS, I. IONIZATION  
PHYS REV, VOL 112, 1141, (1958)
- 321 FITE W L, BRACKMANN R T COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS, II. EXCITATION OF LYMAN-ALPHA RADIATION  
PHYS REV, VOL 112, 1151, (1958)
- 322 BRACKMANN R T, FITE W L COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS, III. ELASTIC SCATTERING  
PHYS REV, VOL 112, 1157, (1958)
- 323 FITE W L, BRACKMANN R T IONIZATION OF ATOMIC OXYGEN ON ELECTRON IMPACT  
PHYS REV, VOL 113, 815, (1959)
- 324 SCHULZ G J FORMATION OF H- IONS BY ELECTRON IMPACT ON H2  
PHYS REV, VOL 113, 816, (1959)
- 325 LIN S C, KIVEL B SLOW-ELECTRON SCATTERING BY ATOMIC OXYGEN  
PHYS REV, VOL 114, 1026, (1959)
- 326 FITE W L, STEBBINGS R F, BRACKMANN R T COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS, IV. EXCITATION OF LYMAN-ALPHA RADIATION NEAR THRESHOLD  
PHYS REV, VOL 116, 356, (1959)
- 327 LICHTEN W, SCHULTZ S CROSS SECTIONS FOR THE EXCITATION OF THE METASTABLE 2S STATE OF ATOMIC HYDROGEN BY ELECTRON COLLISION  
PHYS REV, VOL 116, 1132, (1959)
- 328 SCHULZ G J MEASUREMENT OF EXCITATION OF N2, CO, AND HE BY ELECTRON IMPACT  
PHYS REV, VOL 116, 1141, (1959)
- 329 RUBIN K, PEREL J, BEDARSON R MEASUREMENT OF THE TOTAL, DIFFERENTIAL, AND EXCHANGE CROSS SECTIONS FOR THE SCATTERING OF LOW-ENERGY ELECTRONS BY POTASSIUM  
PHYS REV, VOL 117, 151, (1960)
- 330 WESTIN S INVESTIGATIONS ON THE ELASTIC SCATTERING OF SLOW ELECTRONS IN HELIUM, NEON AND ARGON  
KGL NORSKE VIDENSKAB SELSKABS SKRIFTER, VOL 2, 1, (1960)
- 331 STANTON M E, MONAHAN J E CROSS SECTION FOR FORMATION OF DOUBLY-IONIZED HELIUM BY ELECTRON IMPACT  
PHYS REV, VOL 119, 711, (1960)
- 332 STEBBINGS R F, FITE W L, HUMMER D A, BRACKMANN R T COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS, V. EXCITATION OF METASTABLE 2S HYDROGEN ATOMS  
PHYS REV, VOL 119, 1930, (1960)
- 333 STEWART D T ELECTRON EXCITATION FUNCTIONS OF THE FIRST NEGATIVE BANDS OF (N2)  
PROC PHYS SOC LONDON A, VOL 69, 437, (1956)
- 334 STEWART D T, GABATMULER E SOME ELECTRON COLLISION CROSS SECTIONS FOR NITROGEN AND OXYGEN  
PROC PHYS SOC LONDON, VOL 72, 287, (1956)

- 335 BOYD R L F, GREEN G W ELECTRON IONIZATION CROSS SECTIONS USING CHOPPED BEAMS  
PROC PHYS SOC LONDON, VOL 71, 351, (1958)
- 336 CORRIGAN S J B, VON ENGEL A THE EXCITATION OF HELIUM BY ELECTRONS OF LOW ENERGY  
PROC PHYS SOC LONDON, VOL 72, 786, (1958)
- 337 TOZER B A, THURBURN R, CRAIGS J D THE ATTACHMENT OF SLOW ELECTRONS IN AIR AND OXYGEN  
PROC PHYS SOC LONDON, VOL 72, 1081, (1958)
- 338 STEWART D T, SAMATHULER E ELECTRON COLLISION CROSS SECTIONS IN HELIUM  
PROC PHYS SOC LONDON, VOL 74, 473, (1959)
- 339 OTVOS J W, STEVENSON D CROSS-SECTIONS OF MOLECULES FOR IONIZATION BY ELECTRONS  
J AM CHEM SOC, VOL 78, 546, (1956)
- 340 LAMPE F W, FRANKLIN J L, FIELD F H CROSS SECTIONS FOR IONIZATION BY ELECTRONS  
J AM CHEM SOC, VOL 79, 6129, (1957)
- 341 FROST D C, MCDOWELL C THE IONIZATION AND DISSOCIATION OF OXYGEN BY ELECTRON IMPACT  
J AM CHEM SOC, VOL 80, 6183, (1958)
- 342 STEVENSON D ON THE MASS SPECTRA OF HYDROGEN AND DEUTERIUM  
J CHEM PHYS, VOL 15, 409, (1947)
- 343 ZAPESCHNYI I P, KISHKO S M SOME RESULTS OF INVESTIGATION OF THE EXCITATION FUNCTIONS OF THE  
(N2)+ NEGATIVE SYSTEM BANDS  
RUSS ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 23, 954, (1959)
- 344 VOLKOVA L M THE EFFECTIVE EXCITATION CROSS-SECTIONS OF CERTAIN POTASSIUM AND  
ARGON LINES  
RUSS ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 23, 957, (1959)
- 346 CRAIGS J D, HOPWOOD W ELECTRON/ION RECOMBINATION IN HYDROGEN SPARK DISCHARGES  
PROC PHYS SOC LONDON A, VOL 59, 771, (1947)
- 347 KNOX B E, BURTT B F NEGATIVE ION FORMATION IN H<sub>2</sub>O AND IN H<sub>2</sub>O BY ELECTRON IMPACT  
J CHEM PHYS, VOL 28, 1246, (1958)
- 349 HASSEY M S W, MOISEWITSCH B L THE EXCITATION OF THE 2 TRIPLET P STATE OF HELIUM BY ELECTRON  
IMPACT  
PROC ROY SOC LONDON SER A, VOL 258, 147, (1960)
- 350 KINGSTON A E, MOISEWITSCH B L, SKINNER B G THE 1S-2S EXCITATION OF HYDROGEN ATOMS BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 258, 245, (1960)
- 351 BELL K L, MOISEWITSCH B L FIRST-ORDER EXCHANGE APPROXIMATION  
PROC ROY SOC LONDON SER A, VOL 276, 346, (1963)
- 352 CROMPTON R W, SUTTON D J EXPERIMENTAL INVESTIGATION OF THE DIFFUSION OF SLOW ELECTRONS  
IN NITROGEN AND HYDROGEN  
PROC ROY SOC LONDON SER A, VOL 215, 467, (1952)
- 353 FOX R E STUDY OF MULTIPLE IONIZATION IN HELIUM AND XENON BY ELECTRON IMPACT  
(IN) ADVANCES IN MASS SPECTROMETRY, J D WALDEN, EDITOR, PERGAMON  
PRESS, NEW YORK, PAGE 307, 1959, PROCEEDINGS OF A JOINT CONFERENCE  
SPONSORED BY THE HYDROCARBON RESEARCH GROUP, INSTITUTE OF PETROLEUM,  
AND ASTM COMMITTEE E-16 (UNIVERSITY OF LONDON, 24-26 SEPTEMBER 1958)
- 354 CORRIGAN S J B, VON ENGEL A EXCITATION AND DISSOCIATION OF HYDROGEN BY AN ELECTRON SWARM  
PROC ROY SOC LONDON SER A, VOL 245, 335, (1958)
- 355 KENTY C RECOMBINATION OF ARGON IONS AND ELECTRONS  
PHYS REV, VOL 32, 624, (1928)
- 356 TOZER B A MEASUREMENTS OF IONIZATION CROSS SECTIONS FOR ELECTRON IMPACT.  
I. TECHNIQUE AND DATA FOR METHANE  
J ELECTRON CONTROL, VOL 4, 149, (1958)
- 357 TOZER B A, CRAIGS J D CROSS SECTIONS FOR IONIZATION OF THE INERT GASES BY ELECTRON IMPACT  
J ELECTRON CONTROL, VOL 8, 103, (1960)
- 358 ZANSTRA H RECOMBINATION AND THE LONG DURATION OF THE BALMER SPECTRUM  
PROC ROY SOC LONDON SER A, VOL 184, 236, (1946)
- 359 STONE P H, REITZ J R ELASTIC SCATTERING OF SLOW ELECTRONS BY CESIUM ATOMS  
PHYS REV, VOL 131, 2181, (1963)
- 360 BEKEFI G, BROWN S C COLLISION CROSS SECTION AND ENERGY LOSS OF SLOW ELECTRONS  
IN HYDROGEN  
PHYS REV, VOL 112, 189, (1958)



- 361 SMIT C, SMIT J A, VREDENBERG M J  
EXCITATION FUNCTIONS OF THE TRIPLET LINES 4713 AND 5876 ANGSTROMS OF HELIUM MEASURED WITH LOW ENERGY ELECTRONS  
PHYSICA, VOL 24, 380, (1958)
- 362 KATO T  
UPPER AND LOWER BOUNDS OF SCATTERING PHASES  
PROGR THEORET PHYS KYOTO, VOL 6, 394, (1951)
- 364 DUNN G M, KIEFFER L J  
DISSOCIATIVE IONIZATION OF  $H_2$ , A STUDY OF ANGULAR DISTRIBUTIONS AND ENERGY DISTRIBUTIONS OF RESULTANT FAST PHOTONS  
PHYS REV, VOL 132, 2100, (1963)
- 365 WATANABE M, NIIDA J  
IONIZATION OF THE NEGATIVE OXYGEN ION BY ELECTRON IMPACT, III.  
J PHYS SOC JAPAN, VOL 5, 149, (1950)
- 366 YAMANOUCHI T  
PROBABILITIES OF EXCITATION AND DE-EXCITATION OF METASTABLE STATES OF OXYGEN ATOM BY COLLISION OF SLOW ELECTRON  
J PHYS SOC JAPAN, VOL 5, 154, (1950)
- 367 MOISEWITSCH B L  
THE 2 TRIPLET S TO 2 TRIPLET P, 3 TRIPLET P, 3 TRIPLET D, 4 TRIPLET D EXCITATIONS OF HELIUM ATOMS BY ELECTRONS  
MONTHLY NOTICES ROY ASTRON SOC, VOL 117, 189, (1957)
- 368 MAUER E, WU T Y  
CROSS SECTIONS OF DISSOCIATIVE RECOMBINATION  
CAN J PHYS, VOL 34, 1434, (1956)
- 369 OCHKUR V T, PETROV I U V  
CALCULATION OF ELASTIC SCATTERING OF SLOW ELECTRONS IN HYDROGEN BY THE INTEGRAL EQUATION METHOD  
SOVIET PHYS JETP ENGLISH transl, VOL 4, 144, (1957)
- 370 IVASH E V  
DISSOCIATION OF THE HYDROGEN MOLECULE ION BY ELECTRON IMPACT  
PHYS REV, VOL 112, 155, (1958)
- 372 LASSETTRE E N, BERMAN A, SILVERMAN S M, KRASHOV M E  
AN ELECTRON SPECTROMETER FOR THE STUDY OF INELASTIC COLLISION CROSS SECTIONS  
SCIENTIFIC REPORT 2, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-15991, 1953, 69 PAGES
- 373 LASSETTRE E N, SILVERMAN S M, KRASHOV M E  
THE INELASTIC SCATTERING OF ELECTRONS BY HELIUM  
SCIENTIFIC REPORT 3, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-17410, 1953, 48 PAGES
- 374 LASSETTRE E N, SILVERMAN S M  
INELASTIC COLLISION CROSS SECTIONS OF CARBON MONOXIDE  
SCIENTIFIC REPORT 4, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-18643, 1953, 69 PAGES
- 375 LASSETTRE E N, KRASHOV M E  
AN ELECTRON IMPACT STUDY OF NITROGEN IN THE KINETIC ENERGY RANGE 400-600 VOLTS  
SCIENTIFIC REPORT 5, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-20361, 1953, 62 PAGES
- 376 LASSETTRE E N, SILVERMAN S M, KRASHOV M E  
ELECTRONIC COLLISION CROSS SECTIONS AND OSCILLATOR STRENGTHS FOR OXYGEN IN THE SCHUMANN-Runge REGION  
SCIENTIFIC REPORT 6, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-74054, 1954, 36 PAGES
- 377 SILVERMAN S M, LASSETTRE E N  
ELECTRONIC COLLISION CROSS SECTIONS FOR OXYGEN AT EXCITATION ENERGIES ABOVE 10 VOLTS  
SCIENTIFIC REPORT 7, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-146 448, 1957, 54 PAGES
- 378 SILVERMAN S M, LASSETTRE E N  
ELECTRONIC COLLISION CROSS SECTIONS FOR NITROGEN AT EXCITATION ENERGIES FROM 10 TO 80 ELECTRON VOLTS  
SCIENTIFIC REPORT 8, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-152 465, 1957, 37 PAGES
- 379 SILVERMAN S M, LASSETTRE E N  
ADDITIONAL COLLISION CROSS SECTIONS FOR HELIUM, ESPECIALLY IN THE IONIZED CONTINUUM  
SCIENTIFIC REPORT 9, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, 1957, 20 PAGES
- 380 SHILOFF J C, LASSETTRE E N  
A COLLISION CROSS SECTION STUDY OF  $C O_2$  WITH A THEORETICAL STUDY OF TWO TRANSITIONS  
SCIENTIFIC REPORT 10, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-152 447, 1957, 94 PAGES
- 381 LASSETTRE E N, SILVERMAN S M, KRASHOV M E  
FURTHER DEVELOPMENTS IN THE THEORY AND USE OF THE ELECTRON SPECTROMETER  
SCIENTIFIC REPORT 11, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AD-152 468, 1957, 21 PAGES
- 382 LASSETTRE E N, WHITE E R  
ELECTRONIC COLLISION CROSS SECTIONS OF WATER VAPOR  
SCIENTIFIC REPORT 12, THE OHIO STATE UNIVERSITY RESEARCH FOUNDATION, COLUMBUS, OHIO, AFRC-7N-50-660, AD-152 643, 1958, 52 PAGES

- 383 SACHL V ELASTIC SCATTERING OF ELECTRONS BY HELIUM AND HYDROGEN ATOMS IN  
GROUND QUANTUM STATES  
PHYS REV. VOL 110, 691, (1958)
- 384 BONDWITZ S, GREENBERG M VARIATIONAL CALCULATION OF THE SCATTERING OF ELECTRONS OF  
NEARLY ZERO ENERGY BY HYDROGEN ATOMS  
PHYS REV. VOL 108, 716, (1957)
- 385 ALTMULER S THEORY OF LOW-ENERGY ELECTRON SCATTERING BY POLAR MOLECULES  
PHYS REV. VOL 107, 114, (1957)
- 386 BARANGER E, GERJUOY E HELIUM EXCITATION CROSS SECTIONS NEAR THRESHOLD  
PHYS REV. VOL 106, 1182, (1957)
- 387 ROBINSON L B ELASTIC SCATTERING OF LOW-ENERGY ELECTRONS BY ATOMIC NITROGEN  
AND ATOMIC OXYGEN  
PHYS REV. VOL 105, 922, (1957)
- 388 BYATT W J ANALYTICAL REPRESENTATION OF HARTREE POTENTIALS AND ELECTRON  
SCATTERING  
PHYS REV. VOL 104, 1298, (1956)
- 389 BOROWITZ S, KLEIN M M PERTURBATION CALCULATION OF THE INELASTIC SCATTERING OF ELECTRONS  
BY HYDROGEN ATOMS  
PHYS REV. VOL 103, 612, (1956)
- 390 GELTMAN S THEORY OF IONIZATION PROBABILITY NEAR THRESHOLD  
PHYS REV. VOL 102, 171, (1956)
- 391 HART M W, GRAY E P, STATISTICAL APPROACH TO COLLISION PROCESSES, APPLICATION TO  
QUINN M M ATOMIC EXCITATION  
PHYS REV. VOL 101, 84, (1956)
- 392 GERJUOY E, STEIN S ROTATIONAL EXCITATION BY SLOW ELECTRONS. II.  
PHYS REV. VOL 98, 1848, (1955)
- 393 BOYET H, BOROWITZ S A VARIATIONAL CALCULATION OF THE ELASTIC SCATTERING OF ELECTRONS BY  
HYDROGEN ATOMS  
PHYS REV. VOL 93, 1225, (1954)
- 394 KERNER E M THE DISSOCIATION OF  $(H_2)^+$  BY ELECTRON IMPACT  
PHYS REV. VOL 92, 1441, (1953)
- 395 ALTMULER S EXCITATION CROSS SECTION FOR HELIUM ATOMS. II.  
PHYS REV. VOL 89, 1093, (1953)
- 396 ALTMULER S EXCITATION CROSS SECTION FOR HELIUM ATOMS  
PHYS REV. VOL 87, 992, (1952)
- 397 BARBIERE D ENERGY DISTRIBUTION, DRIFT VELOCITY, AND TEMPERATURE OF SLOW  
ELECTRONS IN HELIUM AND ARGON  
PHYS REV. VOL 84, 653, (1951)
- 398 MASSEY H S W, MOISEWITSCH B L THE SCATTERING OF ELECTRONS BY HYDROGEN ATOMS  
PHYS REV. VOL 78, 180, (1950)
- 399 KLEIN M M, BRUECKNER K A INTERACTION OF SLOW ELECTRONS WITH ATOMIC OXYGEN AND ATOMIC NITROGEN  
PHYS REV. VOL 111, 1115, (1958)
- 400 TENKIN A POLARIZATION AND EXCHANGE EFFECTS IN THE SCATTERING OF ELECTRONS  
FROM ATOMS WITH APPLICATION TO OXYGEN  
PHYS REV. VOL 107, 1084, (1957)
- 401 GERJUOY E, STEIN S ROTATIONAL EXCITATION BY SLOW ELECTRONS  
PHYS REV. VOL 97, 1671, (1955)
- 402 KERNER E M THE EXCITATION OF MOLECULAR ROTATIONS AND VIBRATIONS IN INELASTIC  
SCATTERING PROCESSES  
PHYS REV. VOL 91, 1174, (1953)
- 403 ALTMULER S APPLICATIONS OF VARIATIONAL PRINCIPLES TO SCATTERING PROBLEMS  
PHYS REV. VOL 89, 1278, (1953)
- 404 SEATON M J ELECTRON EXCITEMENT OF FORBIDDEN LINES OCCURRING IN GASEOUS NEBULAE  
PROC ROY SOC LONDON SER A, VOL 218, 488, (1953)
- 405 MASSEY H S W, MOISEWITSCH B L THE APPLICATION OF VARIATIONAL METHODS TO ATOMIC SCATTERING PROBLEMS  
I. THE ELASTIC SCATTERING OF ELECTRONS BY HYDROGEN ATOMS  
PROC ROY SOC LONDON SER A, VOL 269, 483, (1961)

- 407 HAMMELING P, KIVEL B,  
SHINE M W LOW-ENERGY ELASTIC SCATTERING OF ELECTRONS BY OXYGEN AND NITROGEN  
J APPL PHYS, VOL 28, 76, (1957)
- 408 OHMURA T, MARA Y,  
YAMANOUCHI T LOW ENERGY ELECTRON-HYDROGEN SCATTERING  
PROGR THEORET PHYS KYOTO, VOL 20, 82, (1958)
- 409 TIETZ T DER TOTALE WIRKUNGSQUERSCHNITT UND DER DIFFUSIONSSTREUQUERSCHNITT  
VON HARTREE-POTENTIALEN  
ANN PHYSIK, VOL 2, 387, (1959)
- 410 BURNS J F EXPERIMENTAL DETECTION OF AUTO-IONIZING TRANSITIONS IN KRYPTON BY  
ELECTRON IMPACT  
NATURE, VOL 192, 651, (1961)
- 411 NAGAHARA S THE SCATTERING OF SLOW ELECTRONS BY THE DIATOMIC MOLECULES.  
II. ELASTIC SCATTERING BY THE HYDROGEN MOLECULES  
J PHYS SOC JAPAN, VOL 9, 52, (1954)
- 412 SEATON M J THE APPLICATION OF VARIATIONAL METHODS TO ATOMIC SCATTERING PROBLEMS  
V. THE ZERO ENERGY LIMIT OF THE CROSS-SECTION FOR ELASTIC SCATTERING  
OF ELECTRONS BY HYDROGEN ATOMS  
PROC ROY SOC LONDON SER A, VOL 241, 522, (1957)
- 413 MCCREA D, MCKIRGAN T V M ELECTRON EXCITATION OF ATOMIC HYDROGEN IN THE 2P LEVEL  
PROC PHYS SOC LONDON, VOL 75, 235, (1960)
- 414 VOLKOVA L M EFFECTIVE CROSS SECTIONS FOR EXCITATION OF CERTAIN SPECTRAL LINES  
OF SODIUM  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 11, 420, (1961)
- 415 GELTMAN S ELECTRON DETACHMENT FROM THE NEGATIVE HYDROGEN ION BY ELECTRON  
IMPACT  
PROC PHYS SOC LONDON, VOL 75, 67, (1960)
- 416 BRANSUEN R H, DALGARNO A,  
JOHN T L, SEATON M J THE ELASTIC SCATTERING OF SLOW ELECTRONS BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON, VOL 71, 877, (1958)
- 417 BURGESS A NEW RESULTS ON CORONAL CROSS SECTIONS  
MEM SOC ROY SCI LIEGE, VOL 4, 299, (1961)
- 418 KHASHABA S, MASSEY H S W THE EXCITATION OF THE 2P STATE OF HYDROGEN BY SLOW ELECTRONS -  
DISTORTED WAVE TREATMENT  
PROC PHYS SOC LONDON, VOL 71, 574, (1958)
- 419 BUOY T J M ELECTRON EXCITATION OF ATOMIC HYDROGEN IN THE 2S STATE  
PROC PHYS SOC LONDON, VOL 72, 523, (1958)
- 420 HARRIOTT M CALCULATION OF THE 1S-2S ELECTRON EXCITATION CROSS SECTION OF  
HYDROGEN  
PROC PHYS SOC LONDON, VOL 72, 121, (1958)
- 421 CARTER C, MARCH N H,  
VINCENT D X-RAY AND ELECTRON SCATTERING BY MOLECULAR HYDROGEN  
PROC PHYS SOC LONDON, VOL 71, 2, (1958)
- 422 SEATON M J THE USE OF EXTRAPOLATED QUANTUM DEFECTS AS A CHECK ON CALCULATED  
PHASES FOR SCATTERING OF ELECTRONS BY POSITIVE IONS  
PROC PHYS SOC LONDON A, VOL 70, 620, (1957)
- 423 RATES D R, WISKELLY D ELECTRON COLLISION PARTIAL CROSS SECTIONS FOR THE 1S-2S AND 1S-3S  
TRANSITIONS OF ATOMIC HYDROGEN  
PROC PHYS SOC LONDON A, VOL 70, 539, (1957)
- 424 MCCARROLL R THE EXCITATION OF THE DISCRETE LEVELS OF ATOMIC HYDROGEN BY FAST  
ELECTRONS  
PROC PHYS SOC LONDON A, VOL 70, 460, (1957)
- 425 BRANSDEN R H, MCKEE J S C A VARIATIONAL CALCULATION OF THE CROSS SECTION FOR THE 1S-2S  
EXCITATION OF HYDROGEN BY ELECTRON IMPACT  
PROC PHYS SOC LONDON A, VOL 70, 390, (1957)
- 426 HARRIOTT M THE CONVERSION OF METASTABLE HELIUM FROM THE SINGLET TO THE TRIPLET  
STATE BY ELECTRON COLLISION  
PROC PHYS SOC LONDON A, VOL 70, 388, (1957)
- 427 PERCIVAL I C ELECTRON EXCITATION OF 3P LEVELS OF OI  
PROC PHYS SOC LONDON A, VOL 70, 241, (1957)
- 428 MASSEY H S W, RIDLEY M O APPLICATION OF VARIATIONAL METHODS TO THE THEORY OF THE SCATTERING  
OF SLOW ELECTRONS BY HYDROGEN MOLECULES  
PROC PHYS SOC LONDON A, VOL 69, 689, (1956)

- 429 BRANSUEN R H, MCKEE J S C THE 1S-2S EXCITATION OF HYDROGEN BY ELECTRON IMPACT  
PROC PHYS SOC LONDON A, VOL 69, 422, (1956)
- 430 SWAN P THE IONIZATION BY ELECTRONS OF EXCITED 2S AND 2P STATES OF ATOMIC HYDROGEN  
PROC PHYS SOC LONDON A, VOL 68, 1197, (1955)
- 431 SEATON M J CROSS SECTIONS FOR 2S-2P TRANSITIONS IN H AND 3S-3P TRANSITIONS IN He PRODUCED BY ELECTRON AND BY PROTON IMPACT  
PROC PHYS SOC LONDON A, VOL 68, 457, (1955)
- 432 OPIK U THE LAYZER APPROXIMATION FOR THE TREATMENT OF COLLISIONS OF ELECTRONS WITH ATOMS  
PROC PHYS SOC LONDON A, VOL 48, 377, (1955)
- 433 SWAN P THE ELASTIC SCATTERING OF ELECTRONS BY THE EXCITED 2S AND 2P STATES OF ATOMIC HYDROGEN  
PROC PHYS SOC LONDON A, VOL 67, 1086, (1954)
- 434 CARSON T R THE VIBRATIONAL AND ROTATIONAL EXCITATION OF MOLECULAR HYDROGEN BY ELECTRON IMPACT  
PROC PHYS SOC LONDON A, VOL 67, 909, (1954)
- 435 ROTHENSTEIN M THE SECOND BORN APPROXIMATION IN INELASTIC COLLISIONS OF ELECTRONS WITH ATOMS  
PROC PHYS SOC LONDON A, VOL 67, 673, (1954)
- 436 BRANSUEN R H, DALGARNO A, KING M M THE APPLICATION OF VARIATIONAL METHODS TO SCATTERING BY IONS. II. THE DISTORTED WAVE APPROXIMATION AND THE 1S-2S EXCITATION OF HELIUM IONS BY ELECTRON IMPACT  
PROC PHYS SOC LONDON A, VOL 66, 1097, (1953)
- 437 BLAMA M EXCITATION OF Fe XIV BY ELECTRON COLLISIONS  
RULL ASTRON INST CZECHOSLOVAKIA, VOL 13, 81, (1962)
- 438 MASSEY H S W, MOISEWITSCH B L CALCULATION OF THE 1S-2S ELECTRON EXCITATION CROSS SECTION OF HYDROGEN BY A VARIATIONAL METHOD  
PROC PHYS SOC LONDON A, VOL 66, 406, (1953)
- 439 PACK J L, PHELPS A V, VOSMALL R E DRIFT VELOCITIES OF SLOW ELECTRONS IN KRYPTON, XENON, DEUTERIUM, CARBON MONOXIDE, CARBON DIOXIDE, WATER VAPOR, NITROUS OXIDE, AND AMMONIA  
PHYS REV, VOL 127, 2084, (1962)
- 440 BRANSUEN R H, DALGARNO A THE APPLICATION OF VARIATIONAL METHODS TO SCATTERING BY IONS. I. THE ELASTIC SCATTERING OF ELECTRONS BY HELIUM IONS  
PROC PHYS SOC LONDON A, VOL 66, 268, (1953)
- 441 MASSEY H S W, MOHR C B O STRONG COUPLING IN INELASTIC COLLISIONS OF ELECTRONS WITH ATOMS  
PROC PHYS SOC LONDON A, VOL 65, 845, (1952)
- 442 CZYZAK S J, KRUEGER T K ON THE CALCULATION OF ELECTRON EXCITATION CROSS SECTIONS FOR FORBIDDEN LINES OCCURRING IN GASEOUS NEBULAE (IN) ATOMIC COLLISION PROCESSES, M P C MCCOY, L. L. EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 213, 1964. PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS, (LONDON, 22-26 JULY 1963)
- 443 SCHWARTZ S B, ZIRIN M COLLISIONAL IONIZATION CROSS SECTION FOR Fe XIV IN THE SOLAR CORONA AND THE CORONAL ELECTRON TEMPERATURE  
ASTROPHYS J, VOL 130, 544, (1969)
- 444 BATES D R, KINGSTON A E, MCWHIRTER R W P RECOMBINATION BETWEEN ELECTRONS AND ATOMIC IONS, I. OPTICALLY THIN PLASMAS  
PROC ROY SOC LONDON SER A, VOL 267, 297, (1962)
- 445 FISHER L, MILFORD S N, POMILLA P R HORN CROSS SECTIONS FOR INELASTIC SCATTERING OF ELECTRONS BY HYDROGEN ATOMS, 1S, 2S, 3P, 4D, 4F STATES  
PHYS REV, VOL 119, 153, (1960)
- 446 MCCOY M C, MILFORD S N, HAMEL J J HORN CROSS SECTIONS FOR INELASTIC SCATTERING OF ELECTRONS BY HYDROGEN ATOMS, 1S, 2S, 3P, 3D STATES  
PHYS REV, VOL 119, 120, (1960)
- 447 SCHWARTZ C CALCULATION OF ELASTIC S-WAVE ELECTRON SCATTERING FROM HYDROGEN (IN ABSTRACTS OF) THE SECOND INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (BOULDER, COLORADO, 12-18 JUNE 1961) W A BENJAMIN, INC, NEW YORK, PAGE 146, 1961
- 448 KRALL N A, GERJUOY E UPPER BOUND ON TOTAL ELECTRON SCATTERING CROSS SECTIONS IN HYDROGEN  
PHYS REV, VOL 120, 143, (1960)
- 449 RIVEL B ELECTRON SCATTERING BY NOBLE GASES IN THE LIMIT OF ZERO ENERGY  
PHYS REV, VOL 116, 1484, (1959)

- 450 KIVEL B  
ELASTIC SCATTERING OF LOW ENERGY ELECTRONS BY ARGON  
PHYS REV. VOL 116: 926. (1959)
- 451 STEVENSON D  
THE FRANCK-CONDON PRINCIPLE AND THE IONIZATION AND DISSOCIATION OF  
HYDROGEN BY ELECTRON IMPACT  
J AM CHEM SOC. VOL 82: 4961. (1960)
- 452 GRYZINSKI M  
CLASSICAL THEORY OF ELECTRONIC AND IONIC INELASTIC COLLISIONS  
PHYS REV. VOL 119: 374. (1959)
- 453 SEATON M J  
ELECTRON IMPACT IONIZATION OF HE, O, AND N  
PHYS REV. VOL 113: 814. (1959)
- 454 DRANIN M G  
WIRKUNGSQUERSCHNITTE VON NEUTRALEN WASSERSTOFF, HELIUM UND  
ARSONATOMEN GEGENUEBER ELEKTRONENSTOSS  
Z PHYSIK. VOL 146: 295. (1956)
- 455 MILL E R  
COLLISION PROCESSES INVOLVING HIGHLY IONIZED ATOMS  
AUSTRALIAN J SCI RESEARCH SER A. VOL 4: 437. (1951)
- 456 SAUER N, REACH J Y  
DIFFERENCES IN MASS SPECTRA OF H<sub>2</sub> AND D<sub>2</sub>  
J CHEM PHYS. VOL 15: 150. (1947)
- 457 DEMKOV Y N, SHEPELENKO P P  
CONNECTION BETWEEN THE MULTIM AND Kohn METHODS IN COLLISION THEORY  
SOVIET PHYS JETP ENGLISH TRANSL. VOL 6: 1144. (1958)
- 458 ERSKINE G A, MASSEY H S J  
THE APPLICATION OF VARIATIONAL METHODS TO ATOMIC SCATTERING  
PROBLEMS. II. IMPACT EXCITATION OF THE 2S LEVEL OF ATOMIC  
HYDROGEN-DISTORTED WAVE TREATMENT  
PROC ROY SOC LONDON SER A. VOL 212: 521. (1952)
- 459 MOISEWITSCH B L  
THE APPLICATION OF VARIATIONAL METHODS TO ATOMIC SCATTERING  
PROBLEMS. III. THE ELASTIC SCATTERING OF ELECTRONS BY HELIUM ATOMS  
PROC ROY SOC LONDON SER A. VOL 219: 102. (1953)
- 460 MASSEY H S J, MOISEWITSCH B L  
THE APPLICATION OF VARIATIONAL METHODS TO ATOMIC SCATTERING  
PROBLEMS. IV. THE EXCITATION OF THE 2 SINGLET S AND 2 TRIPLET S  
STATES OF HELIUM BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A. VOL 227: 38. (1954)
- 461 MORANO M, LE GENTIL M C L,  
DESPREZ-REBAUD S  
COLLISIONS D'UN ELECTRON AVEC UN ATOME D'HYDROGENE  
COMPT REND. VOL 249: 766. (1959)
- 462 MUZINAGA S  
A NOTE ON THE FIRST BORN APPROXIMATION IN COLLISIONS OF ELECTRON  
WITH HELIUM  
PROGR THEORET PHYS KYOTO. VOL 23: 562. (1960)
- 463 OHMURA T, MARA Y,  
YAMANOUCHI Y  
NOTE ON THE LOW ENERGY ELECTRON-HYDROGEN SCATTERING  
PROGR THEORET PHYS KYOTO. VOL 22: 152. (1959)
- 464 FRISH S E, YAKHONTOVA V E  
NEW DATA ON EXCITATION FUNCTIONS OF HELIUM LINES  
OPT I SPENTROSKOPIYA. VOL 4: 402. (1958)  
ENGLISH SUMMARY PB 11-1477-4 OBTAINABLE FROM OFFICE OF TECHNICAL  
SERVICES, U.S. DEPT. OF COMMERCE, WASHINGTON, D.C.
- 465 SCHAEFFER O A, HASTINGS J H  
ISOTOPE EFFECT ON BOND RUPTURE BY ELECTRON IMPACT ON HYDROGEN,  
DEUTERIUM AND TRITIUM  
J CHEM PHYS. VOL 18: 1044. (1950)
- 466 DIEBELER V H, REESE R H  
MULTIPLE IONIZATION OF SODIUM VAPOR BY ELECTRON IMPACT  
J CHEM PHYS. VOL 31: 207. (1959)
- 467 FOX R E  
DISSOCIATIVE ATTACHMENT OF ELECTRONS IN IODINE. II. MASS  
SPECTROGRAPHIC DETERMINATION OF THE ENERGY DEPENDENCE OF THE CROSS  
SECTION  
PHYS REV. VOL 109: 2099. (1959)
- 468 HUMES A L, HARRIS M  
TOTAL SCATTERING OF ELECTRONS IN HELIUM  
PHYS REV. VOL 48: 608. (1935)
- 469 McDOWELL M R C, WILLIAMSON J H  
ELECTRON DETACHMENT FROM H<sub>2</sub> BY ELECTRONS  
PHYS LETTERS. VOL 4: 150. (1963)
- 470 MOISEWITSCH B L  
THE ELASTIC SCATTERING OF ZERO ENERGY ELECTRONS BY THE INERT GASES  
(IN ABSTRACTS OF) THE SECOND INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (BOULDER, COLORADO, 12-15 JUNE  
1961) S A BENJAMIN, INC. NEW YORK. PAGE 116. 1961
- 471 VOLKOVA L M, DEVTAYOV A M,  
KUMALOVA A V  
EXCITATION CROSS SECTIONS FOR SOME SPECTRUM LINES OF KRYPTON AND  
XENON  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL. VOL 24: 692. (1960)

- 475 ZAPESCHNYI I P, KISHKO S M ON THE EXCITATION FUNCTIONS OF NITROGEN AND CARBON MONOXIDE MOLECULES IN ENCOUNTERS WITH ELECTRONS  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 24, 955, (1960)
- 476 BOGUANOVA I EXPERIMENTAL INVESTIGATION OF THE EXCITATION FUNCTIONS OF ATOMIC SPECTRUM LINES  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 24, 958, (1960)
- 477 YAKHONTOVA V E EXPERIMENTAL DETERMINATION OF THE CROSS SECTIONS FOR EXCITATION OF THE 2 SINGLET S - N SINGLET P SERIES LINES OF HELIUM BY ELECTRON IMPACT  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 24, 962, (1960)
- 481 CLOUTIER G G, SCHIFF H I ELECTRON IMPACT STUDY OF NITRIC OXIDE USING A MODIFIED RETARDING POTENTIAL DIFFERENCE METHOD  
J CHEM PHYS, VOL 31, 791, (1959)
- 483 COTTIN H ETUDE DES IONS PRODUITS PAR IMPACT ELECTRONIQUE DANS LA VAPEUR D'EAU  
J CHIM PHYS, VOL 46, 1874, (1959)
- 484 SEATON M J FURTHER CALCULATIONS ON ELECTRON EXCITATION OF FORBIDDEN LINES - TRANSITIONS WITH ELECTRIC QUADRUPOLE MOMENTS  
PROC ROY SOC LONDON SER A, VOL 231, 37, (1955)
- 485 LIN CHUN C, ST JOHN R M COLLISIONAL EXCITATION TO THE 4 SINGLET D STATE, HELIUM BY MULTIPLE STATE MECHANISM  
PHYS REV, VOL 128, 1749, (1962)
- 486 KESSLER J, LINDNER H STREUUNG VON ELEKTRONEN AN QUECKSILBERATOMEN IM ENERGIEBEREICH 200 BIS 4000 EV  
Z PHYSIK, VOL 183, 1, (1965)
- 490 SCHWARTZ C ELECTRON SCATTERING FROM HYDROGEN  
PHYS REV, VOL 124, 1468, (1961)
- 491 ROYD H L F, BOKSEPERG A CROSS-SECTION MEASUREMENTS WITH CROSSED BEAMS  
(IN) PROCEEDINGS OF THE FOURTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (UPPSALA, SWEDEN, 17-21 AUGUST 1960)  
N ROBERT NILSSON, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, VOL 1, 529, 1960
- 492 MCFARLAND R M, SOLT-SIK E A AN ALTERNATE METHOD OF MEASUREMENT OF THE POLARIZATION OF LIGHT EMITTED BY HELIUM ATOMS EXCITED BY ENERGETIC ELECTRONS  
PHYS REV, VOL 129, 258, (1963)
- 493 KOLESNIKOV V N, DRUKHOV-DENISOV THE EFFECTIVE CROSS SECTION FOR ELASTIC SCATTERING OF SLOW ELECTRONS BY HYDROGEN ATOMS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 15, 592, (1962)
- 495 MOISEWITSCH B L QUANTUM DEFECTS AND SCATTERING LENGTHS  
PROC PHYS SOC LONDON, VOL 83, 35, (1963)
- 497 SOMERVILLE W M THE IMPORTANCE OF CONSERVATION CONDITIONS IN DISTORTED WAVE CALCULATIONS  
PROC PHYS SOC LONDON, VOL 78, 695, (1961)
- 498 TENNIN A ELECTRON-HYDROGEN PHASE SHIFTS JUST BELOW THE INELASTIC THRESHOLD  
NASA GODDARD SPACE FLIGHT CENTER, GREENBELT, MARYLAND (PREPRINT OF NASA TECHNICAL NOTE D-1720) 1963, 6 PAGES
- 499 SALMONA A, FRENKIEL P CALCUL DE LA DIFFUSION ELASTIQUE SANS POLARISATION ET SANS ECHANGE D'UN ELECTRON DE VITESSE NULLE PAR UN ATOME NEUTRE DE SODIUM DANS L'ETAT FONDAMENTAL  
J PHYS RADIUM, VOL 28, 462, (1954)
- 502 WIESE W L MEASUREMENT OF THE CROSS SECTION FOR ELASTIC SCATTERING OF SLOW ELECTRONS BY HYDROGEN ATOMS  
(IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P HUMBERT AND E CREHIEU-ALCAN, EDITORS, SPERNA, PARIS, VOL 1, 9, 1963
- 503 TENNIN A, POWLE R ELECTRON-HYDROGEN PHASE SHIFTS JUST BELOW THE INELASTIC THRESHOLD  
PHYS REV LETTERS, VOL 10, 22, (1963)
- 504 ZAPESCHNYI I P, SHEVERA V S FINE STRUCTURE OF EXCITATION FUNCTIONS OF CADMIUM LINES  
SOVIET PHYS DOKLADY ENGLISH TRANSL, VOL 6, 1000, (1962)
- 505 VOLKOVA L M EFFECTIVE EXCITATION CROSS SECTIONS FOR POTASSIUM ARC LINES  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 13, 482, (1962)
- 506 ZAPESCHNYI I P, SHIMON L L STUDY OF THE OPTICAL EXCITATION FUNCTIONS OF SODIUM USING THE PHOTOELECTRIC METHOD  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 13, 356, (1962)

- 507 DAMBURG R, PLIERKOP R K  
EXCITATION OF THE 2S AND 2P LEVELS OF THE HYDROGEN ATOM BY SLOW ELECTRONS  
SOVIET PHYS JETP ENGLISH TRANSL. VOL 16, 1247, (1961)
- 510 MCFARLAND R H, SOLTYSIK E A  
ON THE POLARIZATION OF LIGHT RESULTING FROM THE EXCITATION OF HELIUM BY ELECTRONS  
PHYS REV, VOL 127, 2090, (1962)
- 511 BORNOWITZ S  
A PERTURBATION CALCULATION OF THE ELASTIC SCATTERING OF ELECTRONS BY HYDROGEN ATOMS  
RESEARCH REPORT NO. CX-16, INSTITUTE OF MATHEMATICAL SCIENCES, NEW YORK UNIVERSITY, 1954, 20 PAGES
- 512 TENKIN A, SULLIVAN E  
NONADIABATIC THEORY OF ELECTRON-HYDROGEN SCATTERING. II.  
PHYS REV, VOL 129, 1250, (1963)
- 513 JONGENIUS H M, SMIT C, SMIT J A  
MESSUNG OPTISCHER ANREGUNGSFUNKTIONEN IN QUECKSILBER UND HELIUM BEI ANREGUNG DURCH ELEKTROKEN  
(IN) PROCEEDINGS OF THE FOURTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (UPPSALA, SWEDEN, 17-21 AUGUST 1969) N ROBERT NILSSON, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, VOL 1, 240, 240
- 514 BHATTACHARYYA T  
SCATTERING OF ELECTRON BY EXCITED HELIUM ATOM  
INDIAN J PHYS, VOL 35, A23, (1961)
- 515 MUKHERJEE S C, SIL N C  
LOW ENERGY SCATTERING OF ELECTRON BY VARIATIONAL METHOD  
INDIAN J PHYS, VOL 36, 283, (1962)
- 516 SMIT C, SMIT J A, HEIDEMAN H G M  
RELATIVE OPTICAL EXCITATION FUNCTIONS OF HELIUM (EXCITATION BY ELECTRONS)  
PHYSICA, VOL 29, 245, (1963)
- 517 SCHULZ G J  
RESONANCE IN THE ELASTIC SCATTERING OF ELECTRONS IN  
PHYS REV LETTERS, VOL 10, 104, (1963)
- 518 FLEMING R J, MCGILSON G S  
RESONANCE IN ELASTIC SCATTERING OF ELECTRONS BY HELIUM ATOMS  
PROC PHYS SOC LONDON, VOL 81, 974, (1963)
- 519 NEEDLE D W O, LUCAS C B  
THE POLARIZATION OF ELECTRON IMPACT RADIATION IN HELIUM  
PROC ROY SOC LONDON SER A, VOL 271, 129, (1963)
- 520 MALIK F B  
ZUR ELASTISCHEN STREUUNG LANGSAMER ELEKTROKEN IM FELD EINES ATOMS ANGEWANDT AUF DIE P-STREUUNG EINES ELEKTROKEN IM FELD DES ATOMAREN WASSERSTOFFS  
Z NATURFORSCH, VOL 14A, 172, (1959)
- 521 MCFARLAND R H, SOLTYSIK E A  
POLARIZATION OF THE  $\lambda = 5876$  ANGSTROMS AND  $\lambda = 6679$  ANGSTROMS LINES IN HELIUM EXCITED BY ELECTRONS  
PHYS REV, VOL 128, 1758, (1962)
- 522 HALLING L C, MANSON R J, PIPKIN F M  
FREQUENCY SHIFTS I SPIN-EXCHANGE OPTICAL PUMPING EXPERIMENTS  
PHYS REV, VOL 133, A607, (1964)
- 523 FROST D C, MCDOWELL C  
STUDIES OF THE IONIZATION OF MOLECULES BY ELECTRON IMPACT. I. EXCITED STATES OF THE NITROGEN MOLECULAR ION  
PROC ROY SOC LONDON SER A, VOL 232, 227, (1955)
- 524 FROST D C, MCDOWELL C  
STUDIES OF THE IONIZATION OF MOLECULES BY ELECTRON IMPACT. II. EXCITED STATES OF THE MOLECULAR IONS OF METHANE AND THE METHYL HALIDES  
PROC ROY SOC LONDON SER A, VOL 241, 194, (1957)
- 525 KRAUSS M, DIBELER V H, REESE R M  
MULTIPLE IONIZATION OF RARE GASES BY ELECTRON IMPACT  
J RES NATL BUR STD, VOL 63A, 201, (1959)
- 526 FROST D C, MCDOWELL C  
RECENT ELECTRON IMPACT STUDIES ON SIMPLE MOLECULES (O<sub>2</sub>, Cl<sub>2</sub>, I<sub>2</sub>) (IN) ADVANCES IN MASS SPECTROMETRY, J D WALDRON, EDITOR, PENGAMON PRESS, NEW YORK, PAGE 413, 1959. PROCEEDINGS OF A JOINT CONFERENCE SPONSORED BY THE HYDROCARBON RESEARCH GROUP, INSTITUTE OF PETROLEUM, AND ASTM COMMITTEE E-14 (UNIVERSITY OF LONDON, 24-26 SEPTEMBER 1958)
- 527 GEERK J, NEUERT H  
IONISATION UND DISSOZIATION DURCH ELEKTROKENSTOSS BEI METHAN, METHYLALKOHOL UND METHYLAL  
Z NATURFORSCH, VOL 5A, 502, (1950)
- 529 SCHULZ G J  
EXPERIMENTS ON RESONANCES IN THE ELASTIC CROSS SECTION OF ELECTRONS ON RARE-GAS ATOMS  
PHYS REV, VOL 136, A650, (1964)
- 530 PACK J L, WELPS A V  
DRIFT VELOCITIES OF SLOW ELECTRONS IN HELIUM, NEON, ARGON, HYDROGEN AND NITROGEN  
PHYS REV, VOL 121, 798, (1961)

- 531 COLLIN J  
L'IONISATION ET LA DISSOCIATION DES MOLECULES PAR DES ELECTRONS  
NONCENERGETIQUES. II. ET TS EXCITES DE L'ION MOLECULAIRE DE C O<sub>2</sub> ET  
C S<sub>2</sub>.  
J CHIM PHYS. VOL 57. 424. (1960)
- 532 KLEINHOFFEN M, KRUGER H,  
ULMER R  
EXCITATION AND POLARIZATION OF BALMER - ALPHA RADIATION IN  
ELECTRON-HYDROGEN ATOM COLLISIONS  
PHYS LETTERS. VOL 2. 78. (1962)
- 533 WELTMAN S, RUDGE M R M,  
SEATON M J  
ELECTRON IMPACT IONIZATION OF ATOMIC HYDROGEN  
PROC PHYS SOC LONDON. VOL 81. 375. (1963)
- 534 SOMERVILLE W B  
THE EFFECT OF COUPLING TO N=3 STATES ON BORN 1S-2S AND 1S-2P E-H  
COLLISION CROSS SECTIONS  
PROC PHYS SOC LONDON. VOL 80. 804. (1962)
- 536 ROTENBERG M  
APPLICATION OF STURMIAN FUNCTIONS TO THE SCHRÖDINGER THREE-BODY  
PROBLEM. ELASTIC E+ / H SCATTERING  
ANN PHYS N Y. VOL 19. 262. (1962)
- 537 OMIVAR K  
NON-ADIABATIC TREATMENT OF ELASTIC SCATTERING OF ELECTRONS BY ATOMIC  
HYDROGEN  
RESEARCH REPORT NO. CX-17. INSTITUTE OF MATHEMATICAL SCIENCES. NEW  
YORK UNIVERSITY. 1960. 42 PAGES
- 538 HAMMEN J H  
LOW ENERGY ELASTIC SCATTERING OF ELECTRONS BY ATOMIC HYDROGEN  
THESIS. NEW YORK UNIVERSITY. NEW YORK. NEW YORK. 1966. 67 PAGES
- 539 HAYAKAWA T, SUBIURA T  
IONIZATION AND DISSOCIATION OF MOLECULES AND ATOMS BY ELECTRON  
IMPACT. I. RELATIVE ABUNDANCE, RELATIVE EFFICIENCY OF IONIZATION,  
AND NATURAL ISOTOPE ABUNDANCE  
JULL NANIWA UNIV. VOL 9. 193. (1955)
- 540 MILFORD S N  
APPROXIMATE CROSS-SECTIONS FOR INELASTIC COLLISIONS OF ELECTRONS  
WITH ATOMS. I. ALLOWED TRANSITIONS  
ASTROPHYS J. VOL 131. 497. (1960)
- 541 BIONDI M A  
DISSOCIATIVE ATTACHMENT OF ELECTRONS IN IODINE. I. MICROWAVE  
DETERMINATION OF THE ABSOLUTE CROSS SECTION AT 300°  
PHYS REV. VOL 109. 2005. (1958)
- 542 DAMBURG R, PETERKOP R K  
APPLICATION OF THE MULTICHANNEL EFFECTIVE RANGE THEORY TO  
ELECTRON-HYDROGEN SCATTERING  
PROC PHYS SOC LONDON. VOL 80. 1073. (1962)
- 543 STAYER T R  
ON THE SCATTERING OF SLOW ELECTRONS BY HYDROGEN ATOMS  
ARCH MATH NATURVIDENSKAP. VOL 51. 29. (1949)
- 544 MOISEWITSCH B L, WILLIAMS A  
THE ELASTIC SCATTERING OF FAST ELECTRONS AND POSITRONS BY HYDROGEN  
AND HELIUM ATOMS  
PROC ROY SOC LONDON SER A. VOL 250. 337. (1959)
- 545 ROBINSON O D  
THE EFFECTS OF DEGENERACY ON THE INELASTIC SCATTERING OF ELECTRONS  
AND PROTONS BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON. VOL 81. 15. (1963)
- 546 SHIT J A, JONGERUS M M  
RENEWED MEASUREMENT OF EXCITATION FUNCTIONS  
APPL SCI RES SECT B. VOL 5. 59. (1956)
- 547 BELT O  
CALCUL DE QUELQUES SECTIONS DE CHOC DANS FE XIV  
COMPT REND. VOL 254. 3147. (1962)
- 549 KINGSTON A E, MOISEWITSCH B L,  
SKINNER B G  
CALCULATION OF THE 1S-2P ELECTRON EXCITATION CROSS-SECTION OF ATOMIC  
HYDROGEN BY THE SCHWINGER VARIATIONAL METHOD  
(IN) PROCEEDINGS OF THE FOURTH INTERNATIONAL CONFERENCE ON  
IONIZATION PHENOMENA IN GASES (UPPSALA, SWEDEN, 17-21 AUGUST 1959)  
N ROBERT NILSSON, EDITOR. NORTH-HOLLAND PUBLISHING COMPANY.  
AMSTERDAM. VOL 1. 236. 1960
- 551 LASSETTRE E N, MEYER V D,  
LONGMIRE M S  
EXCITATION BY ELECTRON IMPACT OF THE QUADRUPOLE-ALLOWED 1 SINGLET  
S TO 3 SINGLET S TRANSITION IN HELIUM  
J CHEM PHYS. VOL 41. 2052. (1964)
- 552 HARA Y, OHMURA T,  
YAMANOUCHI Y  
VARIATIONAL CALCULATION OF THE SCATTERING LENGTHS IN  
ELECTRON-HYDROGEN SCATTERING  
PROGR THEORET PHYS KYOTO. VOL 25. 467. (1961)
- 553 MITTLEMAN M H  
SPIN EXCHANGE IN ELECTRON-HYDROGEN COLLISIONS  
PHYS REV LETTERS. VOL 9. 495. (1962)
- 554 HUGHES R A, KAY R B,  
NEAVER L D  
POLARIZATION OF OPTICAL RADIATION INDUCED BY ELECTRON IMPACT ON  
HELIUM  
PHYS REV. VOL 129. 1630. (1963)



- 555 BECKER P H, DAHLER J S DOUBLE EXCITATION OF HELIUM BY ELECTRONIC IMPACT  
PHYS REV LETTERS, VOL 10, 491, (1963)
- 557 KAMENETSKII V D, YAVOROVSKY O THE APPLICATION OF THE EXPANSION METHOD TO THE ELASTIC SCATTERING  
OF SLOW ELECTRONS BY HEAVY ATOMS  
IZ VYSSHIKH UCHEBN ZAVODENII FIZ, VOL 5, 26, (1960)  
UNEDITED ROUGH DRAFT TRANSLATION PREPARED BY TRANSLATION SERVICES  
BRANCH FOREIGN TECHNOLOGY DIVISION, WRIGHT-PATTERSON AFB, OHIO,  
AD-270 7R2, 1962, 5 PAGES
- 558 SCHULZ G J EXCITATION AND NEGATIVE IONS IN H<sub>2</sub>O  
J CHEM PHYS, VOL 33, 1661, (1960)
- 559 MAECKER H UBER DEN QUERSCHNITT DES FLUORATOMS GEGENUBER ELEKTRONEUSTOSS  
ANN PHYSIK, VOL 1A, 441, (1956)
- 560 VEKLENKO R A, NOVOBRANTSEV I V SINGLE ELECTRON APPROXIMATION IN COLLISION THEORY  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 16, 652, (1963)
- 561 OHMURA T, OHMURA H ELECTRON-HYDROGEN SCATTERING AT LOW ENERGIES  
PHYS REV, VOL 118, 154, (1960)
- 562 TIETZ T PHASENVERSCHIEBUNGEN IN DER STATISTISCHEN THEORIE DES ATOMS  
ANN PHYSIK, VOL 3, 105, (1959)
- 563 LYNN N VARIATIONAL CALCULATIONS OF THE 1S-2S ELECTRON EXCITATION CROSS  
SECTION OF HYDROGEN  
PROC PHYS SOC LONDON, VOL 73, 515, (1959)
- 564 ST JOHN R M, LIN CHUN C, STANTON R L, WEST H D, SWEENEY J P, RINEHART E A SYSTEM FOR PROCESSING AND RECORDING EXCITATION FUNCTION DATA  
REV SCI INSTR, VOL 33, 1089, (1962)
- 565 HASHINO T, MATSUDA H ON THE ELASTIC SCATTERING OF ELECTRONS OF NEARLY ZERO ENERGY BY  
HELIUM ATOMS  
PROGR THEORET PHYS KYOTO, VOL 29, 376, (1963)
- 566 BLAIS H C, MANN J B IONIZATION OF CU, AG, AND AU BY ELECTRON IMPACT  
J CHEM PHYS, VOL 33, 100, (1960)
- 567 WU T Y ELECTRON-HYDROGEN ATOM SCATTERING IN BORN APPROXIMATION  
CAN J PHYS, VOL 38, 1654, (1960)
- 568 LANE N F, LIN CHUN C INELASTIC ELECTRON-ATOM COLLISIONS UNDER NEAR-RESONANCE CONDITIONS,  
ANALYSIS OF TRANSITIONS INVOLVING STRONG COUPLING  
PHYS REV, VOL 133, A947, (1964)
- 569 PHELPS A V ABSORPTION STUDIES OF HELIUM METASTABLE ATOMS AND MOLECULES  
PHYS REV, VOL 99, 1307, (1955)
- 570 GRZYNSKI M BASIC RELATIONS FOR COULOMB INTERACTION AND ITS APPLICATION TO  
ATOMIC COLLISIONS  
(IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION  
PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P HUBERT AND  
E CRENIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 1, 117, 1963
- 571 MCEACHRAN M P, FRASER P A THE ELASTIC SCATTERING OF ELECTRONS BY HYDROGEN ATOMS ALLOWING FOR  
VIRTUAL EXCITATION OF THE 2S STATE OF HYDROGEN  
(IN ABSTRACTS OF) THE SECOND INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (BOULDER, COLORADO, 12-15 JUNE  
1961) W A BENJAMIN, INC, NEW YORK, PAGE 152, 1961
- 572 MOERNI J A, IBERS J A COMPLEX AMPLITUDES FOR ELECTRON SCATTERING BY ATOMS  
PHYS REV, VOL 91, 1182, (1953)
- 574 BREENE R G, NARDONE M C FREE-FREE CONTINUUM OF OXYGEN. II-EFFECT OF POLARIZATION AND  
EXCHANGE  
J OPT SOC AM, VOL 53, 924, (1963)
- 576 RUDGE M R H DETACHMENT FROM THE NEGATIVE HYDROGEN ION BY ELECTRON OR POSITRON  
IMPACT  
PROC PHYS SOC LONDON, VOL 63, 419, (1964)
- 579 SQUIRES B E CROSS SECTION FOR DISSOCIATIVE RECOMBINATION OF NITRIC OXIDE  
SCIENTIFIC REPORT NO.144, IONOSPHERE RESEARCH LABORATORY,  
PENNSYLVANIA STATE UNIVERSITY, AD-251 129, 1961, 51 PAGES
- 580 MUCK H J THE EFFECTIVENESS OF VARIATIONAL METHODS FOR INELASTIC SCATTERING  
PROBLEMS  
PROC PHYS SOC LONDON A, VOL 70, 369, (1957)

- 585 SEATON M J THE EFFECT OF COUPLING TO  $n = 3$  STATES ON BORN SINGLET S TO DOUBLET S AND SINGLET S TO DOUBLET P ELECTRON/H COLLISION CROSS SECTIONS  
PROC PHYS SOC LONDON, VOL 80, 806, (1962)
- 586 PERCIVAL J C A BOX VARIATIONAL METHOD FOR SCATTERING PHASES  
PROC PHYS SOC LONDON A, VOL 70, 494, (1957)
- 587 KOGAN V I ELECTRON TEMPERATURE AND DEGREE OF IONIZATION IN THE INITIAL STAGE OF A PULSED HIGH CURRENT GAS DISCHARGE  
J NUCL ENERGY II, VOL 9, 140, (1959)
- 590 KOLOS W ON WAVE FUNCTIONS FOR THE PROBLEM OF ELECTRON AND X-RAY SCATTERING BY HELIUM ATOMS  
BULL ACAD POLON SCI SER SCI MATH ASTRON, VOL 8, 67, (1960)
- 591 BURNS J F AUTO-IONIZATION AND THE IONIZATION EFFICIENCY CURVES FOR KRYPTON AND XENON  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 451, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 592 GAJEWSKI Y UBER DIE ASYMPTOTISCHEN PHASENVERSCHIEBUNGEN IN DER METHODE DER PARTIALWELLEN BEI STREUUNG VON ELEKTROEN AN THOMAS-FERMI-ATOM  
ANN PHYSIK, VOL 1, 232, (1958)
- 593 OMIDVAR K 2S AND 2P ELECTRON IMPACT EXCITATION IN ATOMIC HYDROGEN  
PHYS REV, VOL 133, A970, (1964)
- 594 HIRSHFELD J L, BROWN S C MICROWAVE METHOD FOR MEASURING THE PROBABILITY OF ELASTIC COLLISION OF ELECTRONS IN A GAS  
J APPL PHYS, VOL 29, 1749, (1958)
- 597 BYATT W J, LANE F D, WATKINS L D RADIAL EIGENFUNCTIONS, PHASE SHIFTS, TOTAL ELASTIC, DIFFERENTIAL ELASTIC, AND MOMENTUM TRANSFER CROSS SECTIONS FOR ELECTRONS SCATTERED FROM OXYGEN AND NITROGEN ATOMS  
SC-4363(1TR) RESEARCH AND DEVELOPMENT, T10-4500 (15TH EDITION) PHYSICS AND MATHEMATICS, SANDIA CORPORATION, ALBUQUERQUE, NEW MEXICO, 1959, 46 PAGES
- 598 MCCUTCHEN C W DRIFT VELOCITY OF ELECTRONS IN MERCURY VAPOR AND MERCURY VAPOR - CO<sub>2</sub> MIXTURES  
PHYS REV, VOL 112, 1848, (1958)
- 600 PHELPS A V EFFECT OF THE IMPRISONMENT OF RESONANCE RADIATION ON EXCITATION EXPERIMENTS  
PHYS REV, VOL 110, 1362, (1958)
- 602 JAHODA F C, SANTEM G A, MCWHIRTER R W P, RIBE F L ANALYSIS OF THE O VIII LYMAN SPECTRUM FROM A TRANSIENT LABORATORY PLASMA  
US ATOMIC ENERGY COMMISSION REPORT LAOC-5798, LOS ALAMOS SCIENTIFIC LABORATORY, LOS ALAMOS, NEW MEXICO, 1962, 14 PAGES PLUS FIGURES
- 607 DEYATOV A M, KAPTSOV M A INVESTIGATION OF EXCITATION FUNCTIONS OF CERTAIN SPECTRAL LINES OF KRYPTON  
VESTN MOSK UNIV SER FIZ MATH ESTESTV NAUK, NO 3, 27, (1955)
- 609 GAILITIS M, DAMBURG R SOME FEATURES OF THE THRESHOLD BEHAVIOR OF THE CROSS SECTIONS FOR EXCITATION OF HYDROGEN BY ELECTRONS DUE TO THE EXISTENCE OF A LINEAR STARK EFFECT IN HYDROGEN  
SOVIET PHYS JETP ENGLISH transl, VOL 17, 1107, (1963)
- 610 FRANKEN P, SANDS R, NOBART J POLARIZATION OF FREE POTASSIUM ATOMS BY EXCHANGE COLLISIONS WITH SODIUM ATOMS AND FREE ELECTRONS  
PHYS REV LETTERS, VOL 1, 118, (1958)
- 612 LASSETTRE E N, SKERBELE A, GLASEN F H, MEYER V D DETERMINATION OF MOLECULAR EXCITATION POTENTIALS BY ELECTRON IMPACT, AN ANOMALY IN THE N<sub>2</sub> SPECTRUM  
J CHEM PHYS, VOL 42, 3479, (1965)
- 616 MASSEY H S W, MOHR C B O EXCITATION PROBABILITIES OF SINGLET AND TRIPLET STATES  
NATURE, VOL 127, 234, (1931)
- 620 COLES S B, WHIDDINGTON R NOTE ON THE ANGULAR DISTRIBUTION IN THE HELIUM DOUBLE EXCITATION  
PROC LEEDS PHIL LIT SOC SCI SECT, VOL 3, 257, (1937)
- 623 CROZIER W D VOLTAGE-INTENSITY RELATIONS IN THE MERCURY SPECTRUM  
PHYS REV, VOL 31, 860, (1928)
- 625 JESSE W P THE RELATIVE IONIZATION IN DIFFERENT GASES FOR SLOW-MOVING ELECTRONS  
PHYS REV, VOL 26, 208, (1925)

- 626 ASUNO R Y IONIZATION CROSS-SECTION NEAR THE THRESHOLD FOR THE RARE-GASES  
(IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION  
PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P. HUBERT AND  
E. CREHIEU-ALCAN, EDITORS, SERNA, PARIS, VOL 1, 29, 1963
- 628 HUGHES A L, LOWE P INTENSITIES IN THE HELIUM SPECTRUM  
PROC ROY SOC LONDON SER A, VOL 104, 480, (1923)
- 629 HUGHES A L, LOWE P INTENSITIES IN THE HYDROGEN SPECTRUM  
PHYS REV, VOL 21, 292, (1923)
- 632 LANGSTROTH G O THE EXCITATION OF BAND SYSTEMS BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 146, 166, (1934)
- 634 LEE A H THE EXCITATION OF INNER ELECTRONS IN ZINC, CADMIUM AND MERCURY BY  
ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 173, 569, (1939)
- 635 WHITE D VOLTAGE-INTENSITY RELATIONS OF MERCURY LINES BELOW IONIZATION  
PHYS REV, VOL 28, 1125, (1926)
- 637 LANGMUIR I, JONES M A COLLISIONS BETWEEN ELECTRONS AND GAS MOLECULES  
PHYS REV, VOL 31, 357, (1928)
- 639 MORSE P M QUANTUM MECHANICS OF COLLISION PROCESSES  
REV MOD PHYS, VOL 4, 577, (1932)
- 642 PRASAD S S, PRASAD K CLASSICAL CALCULATIONS FOR IMPACT IONIZATION CROSS SECTIONS  
PROC PHYS SOC LONDON, VOL 82, 654, (1963)
- 645 CHESHIRE I M POSITRONIUM FORMATION BY FAST POSITRONS IN ATOMIC HYDROGEN  
PROC PHYS SOC LONDON, VOL 83, 227, (1964)
- 648 DAMBURG R, GAILLIS M CALCULATIONS IN THE VICINITY OF THE 2S, 2P THRESHOLD OF THE CROSS  
SECTIONS FOR THE EXCITATION OF HYDROGEN ATOMS BY ELECTRONS  
PROC PHYS SOC LONDON, VOL 82, 1068, (1963)
- 651 LEES J H, SKINNER H VARIATION OF THE INTENSITIES IN THE HELIUM SPECTRUM WITH THE  
VELOCITY OF THE EXCITING ELECTRONS  
NATURE, VOL 123, 836, (1929)
- 652 LUNT H W RESEARCH ON EFFECTS OF ELECTRON COLLISIONS IN ATMOSPHERIC GASES  
TECHNICAL REPORT, UNIVERSITY COLLEGE, LONDON, AFCRL-62-1077,  
AD-298 763, 1962, 50 PAGES
- 653 MENNEBERG W STREUUNG VON ELEKTRONEN AN QUECKSILBER  
NATURWISS, VOL 30, 561, (1932)
- 654 KEEFFE W H EXPERIMENTAL DETERMINATION OF THE CROSS SECTIONS FOR DISSOCIATIVE  
ATTACHMENT OF ELECTRONS IN MOLECULAR IODINE AND PHOTO-DETACHMENT  
OF ELECTRONS FROM NEGATIVE IONS OF ATOMIC IODINE  
SCIENTIFIC REPORT NO. 172, IONOSPHERE RESEARCH LABORATORY,  
PENNSYLVANIA STATE UNIVERSITY, AFCRL-62-1007, AD-286 374, 1962,  
66 PAGES
- 655 MENNEBERG W ZUR STREUUNG VON ELEKTRONEN AN SCHWEREN ATOMEN  
Z PHYSIK, VOL 83, 555, (1933)
- 656 BRICOUT P MESURE DE L'ENERGIE D'UNE RAIE SPECTRALE EXCITEE PAR CHOC  
ELECTRONIQUE  
J. PHYS RADIUM, VOL 9, 88, (1928)
- 657 ZWICKY F DAS VERHALTEN VON LANGSAMEN ELEKTRONEN IN EDELGASEN  
PHYSIK Z, VOL 24, 171, (1923)
- 659 CRAWFORD C K, WOODWARD C E THE MULTIPLE-CROSSED BEAM METHOD FOR MEASURING ELECTRON-IONIZATION  
CROSS SECTIONS  
TECHNICAL REPORT 175, LABORATORY FOR INSULATION RESEARCH,  
MASSACHUSETTS INSTITUTE OF TECHNOLOGY, AD-291 454, 1962, 36 PAGES
- 660 KALLMANN M, BREDIG M A UBER DIE IONIZATIONSVORGANGE IN WASSERSTOFF UND STICKSTOFF  
Z PHYSIK, VOL 43, 14, (1927)
- 663 HERTZ G, DE VISSER J G S UBER DIE ANREGUNG VON SPEKTRALLINIEN DURCH ELEKTRONENSTOSS. II.  
Z PHYSIK, VOL 31, 470, (1925)
- 665 WHITNEY J D INELASTIC COLLISIONS IN MERCURY VAPOR  
PHYS REV, VOL 34, 923, (1929)
- 667 TATE J T, LOZIER W W THE DISSOCIATION OF NITROGEN AND CARBON MONOXIDE BY ELECTRON IMPACT  
PHYS REV, VOL 39, 254, (1932)

- 668 WOMER R L  
ZERO ANGLE ENERGY LOSSES IN HELIUM  
PHYS REV, VOL 45, 689, (1934)
- 669 BURKE P G, SMITH K,  
MCVICAR D D  
THE EXCITATION OF  $H\alpha$  BY ELECTRONS  
PROC PHYS SOC LONDON, VOL 83, 397, (1964)
- 670 MCCARMOLL R  
ELECTRON SCATTERING BY THE HELIUM POSITIVE ION IN THE 1S, 2S OR 2P  
STATE  
PROC PHYS SOC LONDON, VOL 83, 406, (1964)
- 671 STABLEN R C  
CLASSICAL IMPULSE APPROXIMATION FOR INELASTIC ELECTRON-ATOM  
COLLISIONS  
PHYS REV, VOL 133, A1268, (1964)
- 674 COMPTON K T, BENAUE J M  
THE THEORY OF IONIZATION BY COLLISION, IV. CASES OF ELASTIC AND  
PARTIALLY ELASTIC IMPACT  
PHYS REV, VOL 11, 234, (1918)
- 675 SIMONS J H, SEWARD R P  
SLOW ELECTRON SCATTERING AND THE APPARENT ELECTRON AFFINITY OF  
MERCURY  
J CHEM PHYS, VOL 6, 799, (1938)
- 676 KAR K C  
ON THE INELASTIC SCATTERING OF A BEAM OF PARTICLES BY HYDROGEN AND  
HELIUM  
PHIL MAG, VOL 30, 487, (1940)
- 677 MEALEY R M  
THE BEHAVIOUR OF ELECTRONS IN IODINE VAPOUR  
PHIL MAG, VOL 26, 940, (1938)
- 679 DEMMELT H G  
SPIN RESONANCE OF FREE ELECTRONS POLARIZED BY EXCHANGE COLLISIONS  
PHYS REV, VOL 109, 381, (1958)
- 682 BAILEY V A, MEALEY R M  
THE BEHAVIOUR OF ELECTRONS IN CHLORINE  
PHIL MAG, VOL 19, 725, (1935)
- 683 BAILEY J E, MAKINSON R E D,  
SOMERVILLE J M  
THE BEHAVIOUR OF ELECTRONS IN BROMINE  
PHIL MAG, VOL 24, 177, (1937)
- 684 HAAS R  
UNTERSUCHUNGEN UBER DEN ENERGIEVERLUST LANGSAMER ELEKTROEN IN  
STICKSTOFF  
Z PHYSIK, VOL 148, 177, (1957)
- 685 FORESTER D W, COCHRAN L W  
DIFFUSION OF SLOW ELECTRONS IN GASES  
REPORT, OAK RIDGE NATIONAL LABORATORY, OAK RIDGE, TENNESSEE,  
ORNL-3091, 1961, 100 PAGES. (ALSO SUBMITTED AS A MASTER'S THESIS,  
UNIVERSITY OF TENNESSEE)
- 686 RANJEN M  
ENERGIEVERLUST LANGSAMER ELEKTROEN IN WASSERSTOFF  
Z PHYSIK, VOL 70, 393, (1931)
- 687 BAYES K D, KIVELSON D,  
WUNG S  
MEASUREMENT OF CYCLOTRON RESONANCE OF MOLECULAR CROSS SECTIONS  
FOR ELASTIC COLLISIONS WITH 295K ELECTRONS  
J CHEM PHYS, VOL 37, 1217, (1962)
- 692 KUYATT C E, SIMPSON J A  
STRUCTURE BEYOND THE IONIZATION LIMIT IN INELASTIC ELECTRON  
SCATTERING IN THE RARE GASES  
(IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION  
PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P HUBERT AND  
E CREMIEU-ALCAN, EDITORS, SERNA, PARIS, VOL 1, 33, 1963
- 695 EDELSTEIN L A  
ANOMALOUS DISSOCIATION OF MOLECULAR HYDROGEN BY ELECTRON IMPACT  
NATURE, VOL 182, 932, (1958)
- 698 FAINE A C, FUNDINGSLAND O T,  
ADEN A L, CHAMPION K S W  
ELECTRON RECOMBINATION COEFFICIENT MEASUREMENTS IN NITROGEN AT LOW  
PRESSURES  
J APPL PHYS, VOL 29, 928, (1958)
- 699 FROST D C, MCOWELL C  
ELECTRON CAPTURE PROCESSES IN THE HYDROGEN HALIDES  
J CHEM PHYS, VOL 29, 503, (1958)
- 702 DALGARNO A, HENRY R J W  
THE ROTATIONAL EXCITATION OF MOLECULAR HYDROGEN BY SLOW ELECTRONS  
PROC PHYS SOC LONDON, VOL 85, 679, (1965)
- 703 BIALECKE E P, DOUGAL A A  
PRESSURE AND TEMPERATURE VARIATION OF THE ELECTRON-ION RECOMBINATION  
COEFFICIENT IN NITROGEN  
J GEOPHYS RES, VOL 63, 539, (1958)
- 704 HICKMAN W M, FOX R E,  
KJELDAAS T  
PROBABILITY CURVES NEAR THRESHOLD FOR THE FORMATION OF  $He^+$ ,  $Ne^+$ ,  
 $Ar^+$ ,  $Kr^+$ , AND  $Xe^+$  BY ELECTRON IMPACT  
PHYS REV, VOL 96, 63, (1954)

- 706 TEMKIN A POLARIZATION AND THE TRIPLET ELECTRON-HYDROGEN SCATTERING LENGTH  
PHYS REV LETTERS, VOL 6, 354, (1961)
- 707 FOX R E THRESHOLD IONIZATION OF H CL BY ELECTRON IMPACT  
J CHEM PHYS, VOL 32, 384, (1960)
- 708 FROST D C, McDOWELL C THE IONIZATION AND DISSOCIATION OF SOME HALOGEN MOLECULES BY  
ELECTRON IMPACT  
CAN J CHEM, VOL 38, 407, (1960)
- 709 RUFFINE R S A HARTREE SELF CONSISTENT METHOD FOR THE SCATTERING OF POSITONS  
BY HYDROGEN ATOMS  
RESEARCH REPORT NO. CX-48, INSTITUTE OF MATHEMATICAL PHYSICS,  
NEW YORK UNIVERSITY, AFRC-TN-60-44, AD-243 032, 1960, 64 PAGES
- 712 BURKE V M, SEATON M J THE CALCULATION OF ELECTRON-HYDROGEN COLLISION CROSS SECTIONS  
USING THE BORN APPROXIMATION FOR THE REACTION MATRIX  
PROC PHYS SOC LONDON, VOL 77, 199, (1961)
- 713 KUPRIYANOV S E, LATYPOV Z Z IONIZATION OF POSITIVE IONS BY ELECTRONS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 18, 558, (1964)
- 714 SEATON M J THERMAL INELASTIC COLLISION PROCESSES  
REV MOD PHYS, VOL 30, 879, (1958)
- 715 BURGESS A, SEATON M J RADIATIVE RECOMBINATION OF HE  
MONTHLY NOTICES ROY ASTRON SOC, VOL 121, 471, (1960)
- 716 VEKLENKO B A, STAROSTIN A N OPTIMAL SYSTEM OF BASIS FUNCTIONS IN THE THEORY OF COLLISIONS  
BETWEEN ELECTRONS AND ATOMS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 18, 182, (1964)
- 718 OCHAKOV V I THE BORN-OPPENHEIMER METHOD IN THE THEORY OF ATOMIC COLLISIONS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 18, 503, (1964)
- 719 SEATON M J THE QUANTUM DEFECT METHOD  
MONTHLY NOTICES ROY ASTRON SOC, VOL 118, 504, (1958)
- 720 VAN REGENORTER H ELECTRON IMPACT EXCITATION OF POSITIVE IONS - APPLICATION TO  
CA+ 4S-4P AND 3D-4P  
MONTHLY NOTICES ROY ASTRON SOC, VOL 121, 213, (1960)
- 721 SEATON M J STRONG COUPLING IN OPTICALLY ALLOWED ATOMIC TRANSITIONS PRODUCED  
BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 77, 174, (1961)
- 722 LAWSON J, SEATON M J, LAWSON M THE CALCULATION OF BORN PARTIAL WAVE INTEGRALS FOR SOME TRANSITIONS  
IN H PRODUCED BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 77, 192, (1961)
- 723 LATYPOV Z Z, KUPRIYANOV S E, TUNITSKII N N IONIZING COLLISIONS OF ELECTRONS WITH IONS AND ATOMS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 19, 570, (1964)
- 724 TAKAYANAGI K EXCITATION OF MOLECULAR ROTATION AND VIBRATION BY LOW ENERGY  
ELECTRON IMPACT  
JILA REPORT NO. 11, JOINT INSTITUTE FOR LABORATORY ASTROPHYSICS,  
UNIVERSITY OF COLORADO, BOULDER, COLORADO, 1960, 46 PAGES
- 726 HUGHES A L, MCILLEN J H ELECTRON SCATTERING IN METHANE, ACETYLENE AND ETHYLENE  
PHYS REV, VOL 44, 276, (1933)
- 734 GRAHAM W J, RUMMIG A J CALCULATED VALUES OF THE PARAMETERS OF NOBLE GAS DISCHARGES  
PHYS REV, VOL 94, 25, (1954)
- 735 BURGESS A A NOTE ON THE CALCULATION OF CORONAL IONIZATION CROSS-SECTIONS  
ASTROPHYS J, VOL 132, 513, (1960)
- 739 CHEN C L ATOMIC PROCESSES IN HELIUM-KRYPTON AND HELIUM-XENON MIXTURES  
PHYS REV, VOL 131, 2550, (1963)
- 740 PERCIVAL I C, SEATON M J THE POLARIZATION OF ATOMIC LINE RADIATION EXCITED BY ELECTRON IMPACT  
PHIL TRANS ROY SOC LONDON SER A, VOL 251, 113, (1958)
- 742 ST JOHN R M, FOWLER R G, BRONCO C J EXCITATION FUNCTION OF HELIUM 3 SINGLET P FOR ELECTRON COLLISIONS  
J OPT SOC AM, VOL 50, 28, (1960)
- 743 ASUNUI R K, KUREPA M V IONIZATION CROSS SECTIONS IN HE, NE, Ar, KR AND Xe BY ELECTRON IMPACT  
J ELECTRON CONTROL, VOL 15, 41, (1963)

- 744 MCRACHAN R P, FRASER P A  
EFFECT OF VIRTUAL EXCITATION OF THE 2S AND 2P STATES ON THE ELASTIC SCATTERING OF ELECTRONS BY ATOMIC HYDROGEN  
PROC PHYS SOC LONDON, VOL 82, 1038, (1963)
- 745 TIEZT T  
STREUUNG VON ELEKTROHENSTRÄHMEN AN NEUTRALEN ATOMEN FÜR VERSCHIEDENE THOMAS-FERMISCHE POTENTIALS  
ANN PHYSIK, VOL 6, 262, (1960)
- 747 MCFARLAND R H  
CAUSE OF THE OBSERVED POLARIZATION OF ELECTRON-INDUCED RADIATION FROM HELIUM  
PHYS REV, VOL 133, A986, (1964)
- 749 VOLKOVA L M  
EFFECTIVE EXCITATION CROSS-SECTIONS OF THE SPECTRAL LINES OF POTASSIUM  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 6, 179, (1959)
- 752 KISHKO S M, KUCHINKA M YU  
EXCITATION FUNCTIONS OF CERTAIN BANDS OF THE SECOND POSITIVE SYSTEM OF N<sub>2</sub>  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 6, 378, (1959)
- 753 DOLGOV G  
POLARIZATION OF LUMINESCENCE OF HELIUM ATOMS UPON EXCITATION BY ELECTRON IMPACT  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 6, 469, (1959)
- 754 VAINSHTEIN L, DOLGOV G  
EFFECTIVE EXCITATION CROSS-SECTIONS OF N SINGLET P LEVELS OF HE BY SLOW ELECTRONS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 7, 1, (1959)
- 755 VOLKOVA L M, DEVYATOV A M  
EFFECTIVE EXCITATION CROSS SECTIONS OF CERTAIN SPECIAL LINES OF ARGON  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 7, 480, (1959)
- 757 KISHKO S M  
PHOTOELECTRIC DETERMINATION OF THE EXCITATION FUNCTIONS OF THE BANDS OF THE NEGATIVE SYSTEM (N<sub>2</sub>)<sup>-</sup>  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 8, 84, (1960)
- 759 ROBBEN F, KUNKEL W B, TALBOT L  
SPECTROSCOPIC STUDY OF ELECTRON RECOMBINATION WITH MONATOMIC IONS IN A HELIUM PLASMA  
PHYS REV, VOL 132, 2363, (1963)
- 760 MATOIA I  
THE SCATTERING OF SLOW ELECTRONS BY HELIUM ATOMS, WITH EXCITATION OF THE 2 TRIPLET S AND 2 SINGLET S LEVELS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 9, 373, (1960)
- 764 BOECKNER C, MOHLER F L  
SCATTERING OF ELECTRONS BY IONS AND THE MOBILITY OF ELECTRONS IN A CAESIUM DISCHARGE  
J RES NAT BUR STD, VOL 10, 357, (1933)
- 765 ITOH T, MISHA T  
MONTE CARLO CALCULATIONS OF THE MOTIONS OF ELECTRONS IN HELIUM  
J APPL PHYS, VOL 31, 744, (1960)
- 766 BUCHELNKOVA I S  
CROSS SECTIONS FOR THE CAPTURE OF SLOW ELECTRONS BY O<sub>2</sub> AND H<sub>2</sub>O MOLECULES AND MOLECULES OF HALOGEN COMPOUNDS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 35, 783, (1959)
- 768 MULLANEY G J, DIBELIUS N R  
DETERMINATION OF ELECTRON DENSITY AND MOBILITY IN SLIGHTLY IONIZED CESIUM  
J AM ROCKET SOC, VOL 31, 1575, (1961)
- 769 FLAVIN H A, MEYERAND H B  
COLLISION PROBABILITY OF LOW ENERGY ELECTRONS WITH CESIUM ATOMS  
ADVANCE ENERGY CONVERSION, VOL 3, 3, (1963)
- 773 FELDMAN P, NOVICK R  
AUTOIONIZING STATES IN THE ALKALI ATOMS WITH MICROSECOND LIFETIMES  
PHYS REV LETTERS, VOL 11, 278, (1963)
- 775 BELY O, VAN REGENMORTER M, TULLY J  
L'EXCITATION DES ATOMES PAR CHOCS ELECTRONIQUES (APPLICATION A L'EXCITATION DES TRANSITIONS DE RESONANCE DANS LES SERIES ISOELECTRONIQUES DU LITHIUM ET DU SODIUM)  
ANN PHYS PARIS, VOL 8, 303, (1963)
- 776 FOX R E  
NEGATIVE ION FORMATION IN N O<sub>2</sub> BY ELECTRON ATTACHMENT  
J CHEM PHYS, VOL 32, 285, (1960)
- 777 BRINK G  
THE IONIZATION OF HELIUM AND ARGON BY ELECTRON IMPACT  
REPORT, LAWRENCE RADIATION LABORATORY, UNIVERSITY OF CALIFORNIA, LIVERMORE, CALIFORNIA, UCRL-6702, 1961, 8 PAGES
- 778 DORMAN F H, MORRISON J D, NICHOLSON A J C  
THRESHOLD LAW FOR THE PROBABILITY OF EXCITATION BY ELECTRON IMPACT  
J CHEM PHYS, VOL 32, 379, (1960)
- 781 FOX R E  
MULTIPLE IONIZATION IN ARGON AND KRYPTON BY ELECTRON IMPACT  
J CHEM PHYS, VOL 33, 200, (1960)

- 783 YAVONSKY R  
IONIZATION OF MERCURY BY ELECTRON IMPACT  
COMPT REND ACAD SCI URSS, VOL 55, 317, (1947)
- 785 MOEHLING O  
THE ELECTRICAL RESISTIVITY OF A PARTIALLY IONIZED CESIUM PLASMA  
AD/AN ENERGY CONVERSION, VOL 3, 69, (1963)
- 787 HUGHES R W, WEAVER L U  
EXCITATION OF THE  $H\epsilon$  II ( $\lambda = 4686$  ANGSTROM) LINE BY ELECTRON IMPACT  
PHYS REV, VOL 132, 710, (1963)
- 792 VARSAVSKY C  
SOME ATOMIC PARAMETERS FOR ULTRAVIOLET LINES  
ASTROPHYS J SUPPL SFR, VOL 6, 75, (1961)
- 794 LASSETTRE E N, BERMAN A, SILVERMAN S M, KRASNOV M E  
ELECTRON SPECTROMETER FOR THE STUDY OF INELASTIC ELECTRONIC COLLISION CROSS SECTIONS  
J CHEM PHYS, VOL 40, 1272, (1964)
- 795 KAHNETSII V D  
ON THE COLLISION OF SLOW MOLECULES  
IZV VYSSHIKH UCHEBN ZAVFENIT FIZ, VOL 3, 42, (1961)
- 798 LASSETTRE E N, SILVERMAN S M, KRASNOV M E  
ELECTRONIC COLLISION CROSS SECTIONS AND OSCILLATOR STRENGTHS FOR OXYGEN IN THE SCHUMANN-RUNGE REGION  
J CHEM PHYS, VOL 40, 1261, (1964)
- 799 SILVERMAN S M, LASSETTRE E N  
ADDITIONAL COLLISION CROSS SECTIONS FOR HELIUM ESPECIALLY IN THE IONIZED CONTINUUM  
J CHEM PHYS, VOL 40, 1265, (1964)
- 800 LASSETTRE E N, SILVERMAN S M, KRASNOV M E  
INELASTIC SCATTERING OF ELECTRONS BY HELIUM  
J CHEM PHYS, VOL 40, 1242, (1964)
- 801 LASSETTRE E N, JONES E A  
THEORETICAL CALCULATION OF ELECTRON COLLISION CROSS SECTIONS FOR THE 1 SINGLET S TO 2 SINGLET P TRANSITION IN HELIUM  
J CHEM PHYS, VOL 40, 1218, (1964)
- 802 JOHNSON R A, MOLT R W, MCCLURE B T  
ELECTRON REMOVAL IN HELIUM AFTERGLOWS  
PHYS REV, VOL 80, 376, (1950)
- 803 LASSETTRE E N, SILVERMAN S M  
INELASTIC COLLISION CROSS SECTIONS OF CARBON MONOXIDE  
J CHEM PHYS, VOL 40, 1256, (1964)
- 804 LASSETTRE E N, JONES E A  
DETERMINATION OF GENERALIZED OSCILLATOR STRENGTHS FOR MOLECULAR HYDROGEN BY ELECTRON IMPACT  
J CHEM PHYS, VOL 40, 1222, (1964)
- 808 FRISH S E, ZAPESOCNYI I P  
COMPUTATION OF EXCITATION FUNCTIONS OF ENERGY STATES OF MERCURY BY OPTICAL EXCITATION FUNCTIONS  
DOKL AKADEM NAUK SSSR, VOL 95, 971, (1954)
- 809 MELLUND E J  
CALCULATION OF COLLISION CROSS SECTIONS BY USE OF RELAXATION TECHNIQUES  
ARL TECHNICAL REPORT 88-303, AIR RESEARCH AND DEVELOPMENT COMMAND, WRIGHT-PATTERSON AIR FORCE BASE, OHIO, AD-246 892, 1960, 30 PAGES
- 810 DAMBURO R, KRAVCHENKO V  
ESTIMATION OF THE EFFECTIVE SCATTERING CROSS SECTIONS BY ALKALI ELEMENTS TAKING INTO ACCOUNT THE STRONG COUPLING  
IZV AKADEM NAUK LATV SSR, VOL 1, 73, (1960)  
(UNEDITED DRAFT TRANSLATION PREPARED BY TECHNICAL DOCUMENTS LIAISON OFFICE, MCLOD, WRIGHT PATTERSON AFB, OHIO, AD-265 707, 1961, 5 PAGES)
- 812 ROBINSON L B  
THE ELASTIC SCATTERING OF LOW ENERGY ELECTRONS BY THE SLATER ORBITAL ATOM  
REPORT, AEROSPACE CORPORATION, EL SEGUNDO, CALIFORNIA, TOR-504(1203-01)TR-1, AD-259 857, 1961, 47 PAGES
- 813 LASSETTRE E N, KRASNOV M E  
COLLISION CROSS-SECTION STUDY OF TWO TRANSITIONS IN NITROGEN  
J CHEM PHYS, VOL 40, 1248, (1964)
- 814 VARSAVSKY C  
ATOMIC PARAMETERS FOR FIVE TIMES IONIZED OXYGEN  
PLANETARY SPACE SCI, VOL 11, 1001, (1963)
- 816 SIEBERTZ K  
Ueber die Struktur der Anregungsfunktion vom Quecksilberlinien  
Z PHYSIK, VOL 68, 505, (1931)
- 818 MARTYMKO YU V, FIRSOV O B, CHIRISOV M I  
SCATTERING OF SLOW ELECTRONS ON ATOMS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 17, 154, (1963)
- 819 BOVE J C  
TRANSPORT COLLISION CROSS SECTIONS FROM ELECTRON DRIFT-VELOCITY DATA  
PHYS REV, VOL 117, 1416, (1960)

- 821 BAUER E, HROHNE M H  
ELASTIC SCATTERING OF ELECTRONS BY THE MANY-ELECTRON ATOM  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 1A, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 822 BELL K L, MOISEWITSCH R L,  
SHIELDS D B  
REARRANGEMENT COLLISIONS - ELASTIC SCATTERING OF ELECTRONS BY LITHIUM  
ATOMS  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 40, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 823 KINGSTON A E  
CALCULATION OF CROSS SECTIONS FOR ELECTRON IONIZATION OF ATOMS USING  
CLASSICAL MECHANICS  
PHYS REV, VOL 135, 41937, (1964)
- 824 PRESHYAKOV L, VAINSTEIN L,  
SOBELMAN I  
ON ONE MODEL FOR THE CALCULATION OF EXCITATION CROSS SECTIONS FOR  
ATOMS  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 243, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 825 POWILLA F R, SHAPIRO J  
THE 2S - 3S EXCITATION OF HYDROGEN ATOMS BY ELECTRON IMPACT  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 330, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 826 PETERKOP R K  
EXCITATION OF THE S-LEVELS OF THE HYDROGEN ATOM  
LATVIJAS PSR ZINATNU AKAD VESTIS, VOL 10, 91, (1959)
- 830 VELORE V  
ON THE CHOICE OF ATOMIC ELECTRON 'WAVE' FUNCTIONS IN SCATTERING  
PROBLEMS. II.  
LATVIJAS PSR ZINATNU AKAD VESTIS, VOL 11, 69, (1959)
- 831 PETERSON J R  
ELECTRON-IMPACT IONIZATION OF ATOMS AND MOLECULES USING A FAST  
CROSSED-BEAM METHOD  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 465, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 835 VELORE V, GAILITIS M,  
DAMBURG R, STEPINSKY P  
ELASTIC SCATTERING OF SLOW ELECTRONS ON LITHIUM ATOMS  
LATVIJAS PSR ZINATNU AKAD VESTIS, VOL 5, 73, (1959)  
TRANSLATION MAY BE BOUGHT FROM ASSOCIATED TECHNICAL SERVICES, INC.,  
P.O. BOX 271, EAST ORANGE, NEW JERSEY
- 836 VELORE V, DAMBURG R  
ON THE CHOICE OF ATOMIC ELECTRON WAVE FUNCTIONS FOR SCATTERING  
PROBLEMS  
LATVIJAS PSR ZINATNU AKAD VESTIS, VOL 7, 57, (1959)
- 837 PORTER J O  
LOW-ENERGY ELECTRON SCATTERING BY MANY ELECTRON ATOMS  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 72, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 838 VAN DE WALLE R T, GROSJEAN C C  
ON THE THEORY OF PRIMARY SPECIFIC IONIZATION IN HELIUM  
NUOVO CIMENTO, VOL 19, 472, (1961)
- 839 STEINER B, GRANSFORD L,  
SEMAN M L  
ENERGY DEPENDENCE FOR THE PHOTODETACHMENT OF 1- NEAR THRESHOLD  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 537, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 843 SEATON M J, OSTERBROCK D E  
RELATIVE (O II) INTENSITIES IN GASEOUS NEBULAE  
ASTROPHYS J, VOL 125, 64, (1957)
- 844 VELORE V, VINKALNS I ZH,  
KARULE E M  
IONIZATION OF HYDROGEN BY ELECTRONS ALLOWING FOR DISTORTION OF  
INCIDENT AND OUTGOING WAVES  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 253, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 845 SLOAN I M, MASSEY H S W  
THE EXCHANGE POLARISATION APPROXIMATION FOR THE ELASTIC SCATTERING  
OF SLOW ELECTRONS AND POSITRONS BY ATOMS AND IONS - ELECTRON  
SCATTERING BY HELIUM IONS  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 16, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)



- 846 ASHENTH W., BEDERSON E.,  
SUNSHINE G. ABSOLUTE MEASUREMENT OF TOTAL CROSS SECTIONS FOR THE SCATTERING OF  
LOW ENERGY ELECTRONS BY ARGON, NITROGEN, AND OXYGEN  
(IN) ATOMIC COLLISION PROCESSES, M. R. C. MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 53, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 847 ASUMUI R. K., CRAIGS J. D. MEASUREMENT OF ELECTRON ATTACHMENT AND IONISATION CROSS SECTIONS IN  
CARBON DIOXIDE  
(IN) ATOMIC COLLISION PROCESSES, M. R. C. MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 549, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 848 OMIOVAR K., SULLIVAN E. ELECTRON IMPACT IONIZATION OF HIGHLY EXCITED ATOMIC HYDROGEN  
(IN) ATOMIC COLLISION PROCESSES, M. R. C. MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 263, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 849 WASHING T., MATSUDA M. ON THE ELASTIC SCATTERING OF SLOW ELECTRONS BY HELIUM ATOMS  
FROM THEORETICAL PHYS. KYOTO, VOL. 38, 918, (1963)
- 850 FLAVIN R. K., MEYERAND R. G. COLLISION CROSS SECTION OF LOW ENERGY ELECTRONS WITH  
CESIUM ATOMS  
PAPER PRESENTED AT THE IEEE THERMIONIC CONVERSION SPECIALIST  
CONFERENCE, BATHING, TENN., OCTOBER 7-9, 1963, 7 PAGES.
- 851 PETERKOP R. K. IONIZATION OF HYDROGEN ATOMS BY SLOW ELECTRONS  
IZV. AKADEM. NAUK LATV. SSR, VOL. 8, 67, (1959)
- 852 CRAIGS J. D., THORBURN R.,  
TOZER B. A. THE ATTACHMENT OF SLOW ELECTRONS IN OXYGEN  
PROC. ROY. SOC. LONDON SER. A, VOL. 240, 473, (1957)
- 853 CLARKE E. M. IONIZATION PROBABILITY CURVES USING AN ELECTRON SELECTOR - RESULTS  
ON  $(N_2)^{+}$ ,  $N^+$ ,  $He^{+}$   
CAN. J. PHYS., VOL. 32, 764, (1954)
- 854 MCEACHRAN R. P., FRASER P. A. D-WAVE CONTRIBUTION TO ELECTRON-HYDROGEN ATOM SCATTERING  
CAN. J. PHYS., VOL. 38, 317, (1960)
- 855 DANGUNG R., PETERKOP R. K. RESONANCES IN THE SCATTERING OF ELECTRONS ON HYDROGEN ATOMS  
SOVIET PHYS. JETP ENGLISH TRANSL., VOL. 17, 167, (1963)
- 856 SILVERMAN S. M., LASSETTIE E. N. GENERALIZED OSCILLATOR STRENGTHS AND ELECTRONIC COLLISION CROSS  
SECTIONS FOR NITROGEN AT EXCITATION ENERGIES ABOVE 10 EV  
J. CHEM. PHYS., VOL. 42, 3470, (1965)
- 857 MICKAN W. W., FOX R. E. ELECTRON ATTACHMENT IN SULFUR HEXAFLUORIDE USING MONOENERGETIC  
ELECTRONS  
J. CHEM. PHYS., VOL. 25, 847, (1956)
- 858 SMITH K., MILLER J. F.,  
MUMFORD A. J. P. THE ELASTIC AND INELASTIC SCATTERING OF ELECTRONS AND POSITRONS  
FROM THE S-STATES OF ATOMIC HYDROGEN  
PHYS. SOC. LONDON, VOL. 74, 559, (1960)
- 859 PRASAD A. N., CRAIGS J. D. MEASUREMENT OF TOWNSEND'S IONIZATION COEFFICIENTS AND ATTACHMENT  
COEFFICIENTS IN OXYGEN  
PHYS. SOC. LONDON, VOL. 77, 385, (1961)
- 860 GRZYNSKI M. FURTHER DEVELOPMENT OF CLASSICAL THEORY OF ATOMIC COLLISIONS  
(IN) ATOMIC COLLISION PROCESSES, M. R. C. MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 226, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 861 MALIK F. B. THE APPLICATION OF THE VARIATIONAL METHOD TO THE ELASTIC SCATTERING  
OF ELECTRONS BY HYDROGEN ATOM  
(IN) ATOMIC COLLISION PROCESSES, M. R. C. MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 88, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 862 CRAIGS J. D., TOZER B. A. THE ATTACHMENT OF SLOW ELECTRONS IN CARBON DIOXIDE  
PROC. ROY. SOC. LONDON SER. A, VOL. 254, 229, (1960)
- 863 HARRIOTT B. THE EXCITATION OF HELIUM BY ELECTRON IMPACT  
(IN) ATOMIC COLLISION PROCESSES, M. R. C. MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 119, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 864 CRAIGS J. D., TOZER B. A. THE ATTACHMENT OF SLOW ELECTRONS IN CARBON MONOXIDE  
PROC. ROY. SOC. LONDON SER. A, VOL. 247, 337, (1958)

- 868 NEYNAUER R, ROTHE E W,  
TRUJILLO S M, MARINO L L  
LOW-ENERGY ELECTRON SCATTERING FROM METASTABLE HELIUM  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 1089, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 869 GOLDEN D E, MANDEL M W  
ABSOLUTE TOTAL ELECTRON-HELIUM-ATOM SCATTERING CROSS SECTIONS FOR  
LOW ELECTRON ENERGIES  
PHYS REV, VOL 138, A14, (1965)
- 871 FLEMING R J, HIGGINSON G S  
CRITIQUE AND EXTENSION OF THE MAIER-LEIBNITZ EXPERIMENT  
(IN) PROCEEDINGS OF THE SIXTH INTERNATIONAL CONFERENCE ON IONIZATION  
PHENOMENA IN GASES (PARIS, 8-13 JULY 1963) P MURET AND  
E CREHIEU-ALCAN, EDITORS, SERMA, PARIS, VOL 2, 183, 1963
- 872 MEYERAND R G, FLAVIN M K  
MEASUREMENT OF THE ELASTIC COLLISION CROSS SECTION OF LOW ENERGY  
ELECTRONS WITH CESIUM ATOMS USING ELECTRON-CYCLOTRON RESONANCE  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 54, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 873 PEACH G, MCDOWELL M R C  
IONIZATIONS OF LITHIUM BY ELECTRONS  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 277, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 874 TAYLOR A J, BURKE P G  
THE SCATTERING OF ELECTRONS BY HYDROGEN CALCULATED BY THE SECOND  
AND CLOSE COUPLING APPROXIMATIONS WITH THE INCLUSION OF  
COUPLING TO THE  $n = 3$  STATES  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 324, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 875 KARLE J, ROHMAN R A  
CALCULATION OF ELECTRON SCATTERING FACTORS. I. NONRELATIVISTIC THEORY  
J CHEM PHYS, VOL 40, 1306, (1964)
- 876 ALLER L H  
TARGET AREAS FOR THE COLLISIONAL EXCITATION OF NEBULAR LINES  
ASTROPHYS J, VOL 111, 670, (1950)
- 879 MALIK F B, TREFFTZ E  
ELASTIC SCATTERING OF LOW ENERGY ELECTRONS BY ATOMIC HYDROGEN  
Z ASTROPHYS, VOL 58, 96, (1968)
- 880 MAUREL M, WOLF R  
VERSUCHE UBER HE-FLUORESCENZ UND STOSS ZWEITER ART VON ANGEREICHEN  
HE-ATOMEN  
Z PHYSIK, VOL 92, 109, (1934)
- 881 GOLANT V E  
COEFFICIENT OF IONIZATION AND MOBILITY OF ELECTRONS IN ARGON  
SOVIET PHYS TECH PHYS ENGLISH TRANSL, VOL 4, 680, (1958)
- 882 ZAPESCHNYI I P  
DETERMINATION OF THE EXCITATION FUNCTIONS OF THE ENERGY LEVELS OF  
HE ATOMS ACCORDING TO OPTICAL EXCITATION FUNCTIONS  
LENINGR UNIV VESTN, VOL 9, 67, (1954)  
TRANSLATION AVAILABLE FROM AMERICAN METEOROLOGICAL SOCIETY,  
47 297 289, 1962
- 884 PILYANKEVICH A N  
SCATTERING OF ELECTRONS ON LIGHT ATOMS  
SOVIET PHYS TECH PHYS ENGLISH TRANSL, VOL 5, 204, (1968)
- 886 GABRIEL A H, MEDDLE C W O  
EXCITATION PROCESSES IN HELIUM  
PROC ROY SOC LONDON SER A, VOL 258, 124, (1960)
- 887 COURT G R, SAYERS J  
ELECTRON-ION RECOMBINATION COEFFICIENTS IN AMMONIA  
BRIT J APPL PHYS, VOL 14, 923, (1966)
- 888 PHELPS A V, PACK J L,  
FROST L S  
DRIFT VELOCITY OF ELECTRONS IN HELIUM  
PHYS REV, VOL 117, 479, (1960)
- 892 DUMBESS A  
THE SEMI-CLASSICAL TREATMENT OF THE EXCITATION AND IONIZATION OF  
ATOMS AND POSITIVE IONS BY ELECTRON IMPACT  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 237, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 895 CHEN J C Y  
VIBRATIONAL EXCITATION OF MOLECULES BY SLOW ELECTRON IMPACT  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 420, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 896 SMITH M  
ELASTIC AND INELASTIC SCATTERING OF ELECTRONS FROM THE S-STATES  
OF ATOMIC HYDROGEN  
PHYS REV, VOL 128, 845, (1966)

- 897 MUTT G L  
PHEDOLM DETERMINANTS APPLIED TO ELECTRON-HYDROGEN SCATTERING  
PHYS REV, VOL 139, A345, (1964)
- 898 JOHN F L  
THE NUMERICAL SOLUTION OF THE EXCHANGE EQUATIONS FOR SLOW ELECTRON  
COLLISIONS WITH HYDROGEN ATOMS  
PROC PHYS SOC LONDON, VOL 76, 532, (1969)
- 899 PU H T  
A GENERALIZED OPTICAL-POTENTIAL METHOD AND ITS APPLICATION TO THE  
SCATTERING OF ELECTRONS BY ATOMIC HYDROGEN  
THESIS, UNIVERSITY OF CALIFORNIA, BERKELEY, 1963, 71 PAGES,  
UCRL-10878
- 900 KYLE M L, TENKIN A  
NONADIABATIC THEORY OF INELASTIC ELECTRON-HYDROGEN SCATTERING  
PHYS REV, VOL 134, A688, (1964)
- 901 MASSEY H S G, MOUSSA A M  
THE ELASTIC SCATTERING OF POSITRONS BY ATOMS AND MOLECULES  
PROC PHYS SOC LONDON, VOL 71, 38, (1958)
- 902 MOUSSA A M  
THE EFFECT OF POLARIZATION ON THE ELASTIC SCATTERING OF POSITRONS  
BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON, VOL 74, 101, (1959)
- 903 GOLDEN R T, HARRISON M F A,  
THOMASMAN P C  
A MEASUREMENT OF THE IONIZATION CROSS-SECTION OF HELIUM IONS BY  
ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 264, 367, (1961)
- 904 KYLE M L, TENKIN A  
NONADIABATIC THEORY OF INELASTIC SCATTERING  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDONELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 282, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 905 SEATON N J  
THE KINETIC TEMPERATURE OF THE INTERSTELLAR GAS IN REGIONS OF  
NEUTRAL HYDROGEN  
AMN ASTROPHYS, VOL 10, 188, (1955)
- 912 ST JOHN R M, FOWLER T G  
NEW PROCESS OF EXCITATION TRANSFER IN HELIUM  
PHYS REV, VOL 122, 1013, (1961)
- 913 AKERIS R, BOROWITZ S  
APPLICATION OF THE IMPULSE APPROXIMATION TO THE SCATTERING OF  
ELECTRONS BY ATOMS. I. INELASTIC SCATTERING BY HYDROGEN ATOMS  
PHYS REV, VOL 122, 1177, (1961)
- 914 MOISEWITSCH B L  
EXCITATION OF THE 2S STATE OF ATOMIC HYDROGEN BY ELECTRON IMPACT  
NATURE, VOL 192, 545, (1961)
- 917 SPRUCH L, ROSENBERG L  
LOW-ENERGY SCATTERING BY A COMPOUND SYSTEM - POSITRONS ON ATOMIC  
HYDROGEN  
PHYS REV, VOL 117, 143, (1960)
- 918 BURKE P G, SCHEY M M  
POLARIZATION AND CORRELATION OF ELECTRON SPIN IN LOW-ENERGY ELASTIC  
ELECTRON-HYDROGEN COLLISIONS  
PHYS REV, VOL 126, 163, (1962)
- 919 MILFORD S N, SCANLON J H,  
MORRISSEY J J  
BORN CROSS SECTIONS FOR INELASTIC SCATTERING OF ELECTRONS BY  
HYDROGEN ATOMS. III. 5S, 5P, 5D, 5F, 5G STATES  
PHYS REV, VOL 120, 1715, (1960)
- 920 DOERING J P, MAMAN B M  
PHOTOIONIZATION OF NITRIC OXIDE  
J CHEM PHYS, VOL 36, 669, (1962)
- 921 LEGLER W  
ANREGUNG VON UV-STRAHLUNG IN STICKSTOFF UND WASSERSTOFF DURCH EINEN  
ELEKTRONENSCHWARM  
Z PHYSIK, VOL 173, 169, (1963)
- 922 CHAMBERLAIN G E, SMITH S J,  
HEEDLE D W O  
EXCITATION OF THE 2P STATE OF HYDROGEN BY ELECTRONS OF  
NEAR-THRESHOLD ENERGY  
PHYS REV LETTERS, VOL 12, 647, (1964)
- 923 WOOLLEY R, ALLEN C W  
THE CORONAL EMISSION SPECTRUM  
MONTHLY NOTICES ROY ASTRON SOC, VOL 108, 292, (1968)
- 924 HANN M M, YATE J T,  
MUSTRULID A  
THE IONIZATION AND DISSOCIATION OF WATER VAPOR AND AMMONIA BY  
ELECTRON IMPACT  
PHYS REV, VOL 58, 340, (1940)
- 926 MITRA S K, RAY B B,  
GHOSH S P  
CROSS-SECTION OF ATOMIC OXYGEN FOR ELASTIC COLLISION WITH ELECTRONS,  
AND REGION F ABSORPTION  
NATURE, VOL 145, 1017, (1940)
- 929 BELOUSOVA I M, GUREVICH D B  
THE DISTRIBUTION OF ATOMS AMONG THE EXCITED LEVELS IN A LOW PRESSURE  
ARC  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 10, 206, (1961)

- 932 SCHULZ G J  
STUDY OF THE  $\text{H}_2\text{O}$  MOLECULE USING ELECTRON BEAMS  
J CHEM PHYS, VOL 34, 1778, (1961)
- 933 COOT = J, LAWSON J,  
HASSEY H S W, SMITH K  
THE ELASTIC SCATTERING OF SLOW POSITRONS BY HYDROGEN ATOMS  
PROC ROY SOC LONDON SER A, VOL 278, 479, (1964)
- 934 BREME R G  
DEIONIZATION CROSS SECTION FOR OXYGEN  
J CHEM PHYS, VOL 35, 824, (1961)
- 935 OCHUKU V I  
COLLISIONS OF SLOW ELECTRONS WITH HYDROGEN ATOMS  
VESTI Leningr Univ Ser Fiz i Khim, VOL 4, 52, (1958)  
TRANSLATION AVAILABLE FROM ATOMIC PHYSICS DATA CENTER, NATIONAL  
BUREAU OF STANDARDS, WASHINGTON, D.C.
- 936 SCHULTZ S  
CROSS-SECTIONS FOR THE EXCITATION OF THE METASTABLE  $2S$  STATE OF  
ATOMIC HYDROGEN  
THESIS, COLUMBIA UNIVERSITY, NEW YORK, 1960, 83 PAGES
- 938 ASUMI R K, CRAGGS J U,  
KUREPA M V  
ELECTRON ATTACHMENT AND IONIZATION IN OXYGEN, CARBON MONOXIDE AND  
CARBON DIOXIDE  
PROC PHYS SOC LONDON, VOL 82, 967, (1963)
- 939 BREME R G, NARDONE H C  
FREE-FREE CONTINUUM OF NITROGEN  
J OPT SOC AM, VOL 51, 692, (1961)
- 940 ASUMI R K, CRAGGS J U  
ELECTRON CAPTURE AND IONIZATION PHENOMENA IN  $\text{S F}_6$  AND  $\text{C}_7\text{F}_{14}$   
PROC PHYS SOC LONDON, VOL 83, 611, (1964)
- 941 FINEMAN H, PETROCELLI A M  
ELECTRON IMPACT STUDY OF C O USING A LOZIER APPARATUS  
J CHEM PHYS, VOL 36, 25, (1962)
- 942 ST JOHN R H, LIN CHUN C  
PRODUCTION OF EXCITATION AND IONIZATION IN HELIUM BY SINGLE-ELECTRON  
IMPACT  
J CHEM PHYS, VOL 41, 195, (1964)
- 943 THOMPSON J B  
THE ATTACHMENT OF SLOW ELECTRONS IN AIR AND OXYGEN  
PROC PHYS SOC LONDON, VOL 73, 821, (1959)
- 944 FREMKEL P  
DIFFUSION ELASTIQUE D'UN ELECTRON DE VITESSE NULLE PAR L'ATOME DE  
NEON (APPROXIMATION DU CHAMP CENTRAL)  
THESIS, UNIVERSITY OF PARIS, SORBONNE, 1960, 37 PAGES
- 946 GLICK R E, LLEVELLYN J A  
IONIZATION CROSS SECTIONS FOR DISSOCIATIVE ELECTRON-MOLECULE  
COLLISIONS  
REPORT, DEPARTMENT OF CHEMISTRY AND THE INSTITUTE OF MOLECULAR  
BIOPHYSICS, FLORIDA STATE UNIVERSITY, TALLAHASSEE, BULLETIN NO. 14,  
DIVISION OF BIOLOGY AND MEDICINE, U S ATOMIC ENERGY COMMISSION,  
1964, 12 PAGES
- 948 BHALLA M S, CRAGGS J D  
MEASUREMENT OF IONIZATION AND ATTACHMENT COEFFICIENTS IN CARBON  
DIOXIDE IN UNIFORM FIELDS  
PROC PHYS SOC LONDON, VOL 76, 369, (1960)
- 950 HARRIOTT J, THORBURN R,  
CRAGGS J D  
NEGATIVE ION FORMATION IN  $\text{C Cl}_4$  AND  $\text{Ti Cl}_4$   
PROC PHYS SOC LONDON B, VOL 67, 437, (1956)
- 953 STEWART D T  
ELECTRON EXCITATION FUNCTIONS OF INFRA-RED NITROGEN SPECTRA  
PROC PHYS SOC LONDON A, VOL 48, 404, (1955)
- 954 SARAPH H  
CROSS SECTIONS FOR  $n$  TO  $n+1$  TRANSITIONS IN HYDROGEN PRODUCED BY  
ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 83, 763, (1964)
- 957 KHVOSTENKO V I, DUKELSKII V M  
FORMATION OF NEGATIVE  $\text{H}_2^-$  IONS IN COLLISIONS OF ELECTRONS WITH  
HYDROGEN MOLECULES  
SOVIET PHYS JETP ENGLISH transl, VOL 6, 657, (1958)
- 958 MELTON C E  
IONIZATION AND EXCITATION PROCESSES IN ARGON, KRYPTON, AND THE  $\text{C}_2$   
HYDROCARBONS PRODUCED BY VARIOUS MEANS  
J CHEM PHYS, VOL 37, 562, (1962)
- 959 GARRETT W R, MANN R A  
ELASTIC SCATTERING OF SLOW ELECTRONS FROM ALKALI ATOMS  
PHYS REV, VOL 135, A504, (1964)
- 960 ZIRIN H  
PHYSICAL CONDITIONS IN LIME FLARES AND ACTIVE PROMINENCES,  
V. EXCITATION AND IONIZATION OF HELIUM AND METALS  
ASTROPHYS J, VOL 135, 521, (1962)
- 962 CHEN J C Y, HASSEY J L  
EXCITATION OF MOLECULAR VIBRATION BY SLOW ELECTRON IMPACT  
J CHEM PHYS, VOL 36, 1407, (1962)

- 963 JEFFERIES J T SOME ELECTRON COLLISION CROSS SECTION OF CA II  
AUSTRALIAN J PHYS. VOL 7, 22, (1954)
- 964 CHEN J C Y THEORY OF SUBEXCITATION ELECTRON SCATTERING BY MOLECULES.  
I. FORMALISM AND THE COMPOUND NEGATIVE-ION STATES. II. EXCITATION AND  
RE-EXCITATION OF MOLECULAR VIBRATION  
J CHEM PHYS. VOL 40, 3577, (1964)
- 965 BAKIS R THEORETICAL CONSIDERATIONS IN THE DESIGN OF AN ELECTRON GUN AND THE  
EVALUATION OF MEASURED EXCITATION FUNCTIONS  
THESIS, KANSAS STATE COLLEGE, 1959, 77 PAGES
- 967 GREENBERG M, BOROWITZ J A VARIATIONAL CALCULATION OF THE SCATTERING CROSS SECTION FOR NEARLY  
ZERO-ENERGY ELECTRONS BY HYDROGEN ATOMS  
RESEARCH REPORT NO. CX-29, NEW YORK UNIVERSITY, INSTITUTE OF  
MATHEMATICAL SCIENCES, DIVISION OF ELECTROMAGNETIC RESEARCH,  
AD-17246, 1957, 51 PAGES
- 968 SKENDELE A THE DESIGN OF AN ELECTRON SOURCE AND ITS APPLICATION TO THE STUDY  
OF ELECTRON IMPACT SPECTRA AT ZERO SCATTERING ANGLE  
THESIS, OHIO STATE UNIVERSITY, 1960, 123 PAGES, UNIVERSITY  
MICROFILMS, INC. ANN ARBOR, MICHIGAN, NO. 60-4135
- 969 NIES F W CONTINUUM RADIATION FROM IONIZED RARE GASES IN REFLECTED SHOCK WAVES  
REPORT, BROWN UNIVERSITY, COMBUSTION DYNAMICS DIVISION, AIR FORCE  
OFFICE OF SCIENTIFIC RESEARCH, AFOSR, WASHINGTON 25, D.C.,  
AFOSR-TN-1303, 1961, 38 PAGES
- 970 BELY O CALCUL DE SECTIONS D'EXCITATION PAR CHOCS ELECTRONIQUES DANS O VI  
COMPT REND. VOL 254, 3075, (1962)
- 971 CURRAN R K LOW-ENERGY PROCESS FOR F- FORMATION IN SF6  
J CHEM PHYS. VOL 34, 1869, (1961)
- 973 FROMMOLD L EINE UNTERSUCHUNG DER ELEKTROENKOMPONENTE VON ELEKTROENLADUNGEN  
Z PHYSIK. VOL 156, 144, (1959)
- 974 HARRISON M THE EXPERIMENTAL DETERMINATION OF IONIZATION CROSS SECTIONS OF GASES  
UNDER ELECTRON IMPACT  
THESIS, THE CATHOLIC UNIVERSITY OF AMERICA, WASHINGTON, D.C., 1956,  
43 PAGES
- 976 LABAHN R W, CALLAWAY J POLARIZATION EFFECTS IN THE ELASTIC SCATTERING OF ELECTRONS FROM  
HELIUM  
PHYS REV. VOL 135, A1539, (1964)
- 977 MURAVEV V T, YAVORSKY B THE ELASTIC SCATTERING OF SLOW S-ELECTRONS BY HELIUM ATOMS  
OPT SPECTRY USSR ENGLISH TRANSL. VOL 15, 69, (1963)
- 978 ROTHE E W, MEYNER R, MARINO L L, TRUJILLO S M ELECTRON IMPACT IONIZATION OF ATOMIC HYDROGEN AND ATOMIC OXYGEN  
PHYS REV. VOL 125, 582, (1962)
- 980 SCHWARTZ C IMPORTANCE OF ANGULAR CORRELATIONS BETWEEN ATOMIC ELECTRONS  
PHYS REV. VOL 126, 1015, (1962)
- 981 MURAVEV V T TRIAL FUNCTION CALCULATIONS OF THE COLLISION OF SLOW ELECTRONS WITH  
HYDROGEN ATOMS  
JULL ACAD SCI USSR PHYS SER ENGL TRANSL. VOL 27, 1006, (1963)
- 982 STOTZ K C INVESTIGATION OF PLASMA AFTERGLOWS WITH APPLICATION IN NITROGEN  
NASA TECHNICAL NOTE, REINSELAER POLYTECHNIC INSTITUTE, TROY,  
NEW YORK, NASA-TN-D-2224, 1963, 94 PAGES
- 983 SWICK D A, KARLE J PATTERN INVERSION FOR COHERENT INELASTIC ELECTRON SCATTERING BY BR2  
J CHEM PHYS. VOL 35, 2247, (1961)
- 984 SCHULZ G J VIBRATIONAL EXCITATION OF N2, CO, AND H2 BY ELECTRON IMPACT  
PHYS REV. VOL 135, A988, (1964)
- 985 BRION C E IONIZATION OF OXYGEN BY MONOENERGETIC ELECTRONS  
J CHEM PHYS. VOL 40, 2995, (1964)
- 986 BLANC C, BLANC D, DEGEILH A, MALESSET C APPLICATION DE LA SPECTROMETRIE DE MASSE A L'ETUDE DE L'IONISATION  
DES GAZ  
J PHYS RADIUM. VOL 23, 219, (1962)
- 987 COOLIDGE A S EXPERIMENTAL VERIFICATION OF THE THEORY OF THE CONTINUOUS SPECTRA OF  
H2 AND O2  
PHYS REV. VOL 65, 236, (1944)

- 988 RAPP D, BRIGLIA D D  
TOTAL CROSS SECTIONS FOR NEGATIVE ION FORMATION IN GASES BY ELECTRON IMPACT  
REPORT, LOCKHEED MISSILES AND SPACE COMPANY, PALO ALTO, CALIFORNIA.  
LMSC-6-74-80-40, 1964, 39 PAGES
- 989 THOMPSON N, WILLIAMS S E  
THE EXCITATION POTENTIAL OF THE NITROGEN SECOND POSITIVE BANDS  
PROC ROY SOC LONDON SER A, VOL 147, 583, (1934)
- 990 KARULE E M, PETERKOP R R  
COLLISIONS OF ELECTRONS WITH LITHIUM ATOMS IN THE STRONG-COUPLED APPROXIMATION  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 16, 519, (1964)
- 991 HOLST W, HOLTSMARK J  
DER WIRKUNGSQUERSCHNITT VON C CL<sub>4</sub>, C H CL<sub>3</sub>, C H<sub>2</sub>CL<sub>2</sub>, C H<sub>3</sub>CL FÜR LANGSAM ELETROENEN  
NOR NORSKE VIDENSKAB REISKABE FORM, VOL 4, 89, (1931)
- 992 SHERIDAN W F, OLDENBERG O, CARLETON M P  
EXCITATION OF NITROGEN BY CONTROLLED PROTON AND ELECTRON IMPACT (IN ABSTRACTS OF) THE SECOND INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (BOULDER, COLORADO, 12-15 JUNE 1961) W A BENJAMIN, INC. NEW YORK, PAGE 159, 1961
- 995 GOODRICH M  
ELECTRON SCATTERING IN HELIUM  
PHYS REV, VOL 52, 249, (1937)
- 996 AKERIS R  
THE APPLICATION OF THE IMPULSE APPROXIMATION TO THE INELASTIC SCATTERING OF ELECTRONS BY HYDROGEN ATOMS  
THESIS, NEW YORK UNIVERSITY, 1960, 57 PAGES, UNIVERSITY MICROFILMS, INC, ANN ARBOR, MICHIGAN, L C CARD NO. MIC 60-2284
- 999 WETZEL M W  
THE THEORETICAL CROSS SECTION FOR K ELECTRON IONIZATION BY ELECTRON IMPACT  
PHYS REV, VOL 49, 531, (1936)
- 1001 HUGHES A L, HERGENROTHER R C  
ELECTRON SCATTERING BY ATOMIC ELECTRONS  
PHYS REV, VOL 46, 186, (1934)
- 1002 JORDAN E R  
THE ELASTIC SCATTERING OF HIGH VELOCITY ELECTRONS BY MERCURY ATOMS AND THE AGREEMENT WITH MOTTS THEORY  
PHYS REV, VOL 45, 47, (1934)
- 1004 HUGHES A L, MCILLLEN J H  
ELASTIC ELECTRON SCATTERING IN NEON  
PHYS REV, VOL 43, 875, (1933)
- 1007 BRODE R B  
THE COLLISION CROSS-SECTION OF ARGON ATOMS FOR 300 TO 2500 VOLT ELECTRONS  
PHYS REV, VOL 39, 547, (1932)
- 1008 BRANSCOMB L  
THE RADIATIVE FORMATION AND DESTRUCTION OF NEGATIVE IONS (IN) PROCEEDINGS OF THE FIFTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (MUNICH, 28 AUGUST - 1 SEPTEMBER 1961) H MAECKER, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, VOL 1, 1, 1962
- 1009 BURKE P G  
THE CONVERGENCE OF THE CLOSE COUPLING EXPANSION  
PROC PHYS SOC LONDON, VOL 82, 443, (1963)
- 1010 STUECKELBERG E C, MORSE D M  
COMPUTATION OF THE EFFECTIVE CROSS SECTION FOR THE RECOMBINATION OF ELECTRONS WITH HYDROGEN IONS  
PHYS REV, VOL 36, 16, (1930)
- 1013 MEYNAUER R, ROTHE E W, MARINO L L, TRUJILLO S M  
LOW-ENERGY ELECTRON SCATTERING FROM ATOMIC OXYGEN  
PHYS REV, VOL 123, 148, (1961)
- 1014 GRYZINSKI M  
CLASSICAL THEORY OF ATOMIC COLLISIONS. I. THEORY OF INELASTIC COLLISIONS  
PHYS REV, VOL 138, A336, (1965)
- 1015 SMITH K, BURKE P G  
EFFECT OF VIRTUAL EXCITATIONS ON THE ELASTIC SCATTERING OF ELECTRONS AND POSITRONS BY ATOMIC HYDROGEN  
PHYS REV, VOL 123, 174, (1961)
- 1016 MURST G S, BORTNER T E, OKELLY L B  
DISSOCIATIVE ELECTRON CAPTURE IN WATER VAPOR  
PHYS REV, VOL 123, 1715, (1961)
- 1017 VARSAVSKY C  
EXCITATION CROSS-SECTIONS FOR HIGHLY IONIZED ATOMS (IN) PROCEEDINGS OF THE FIFTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (MUNICH, 28 AUGUST - 1 SEPTEMBER 1961) H MAECKER, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, VOL 1, 69, 1962
- 1018 MEYNAUER R, ROTHE E W, MARINO L L, TRUJILLO S M  
SCATTERING OF LOW-ENERGY ELECTRONS BY ATOMIC HYDROGEN  
PHYS REV, VOL 124, 135, (1961)
- 1019 CHEN C L  
ELECTRON COLLISIONS IN NEON PLASMA  
PHYS REV, VOL 135, A627, (1964)

- 1021 SCHULTZ B J VIBRATIONAL EXCITATION OF NITROGEN BY ELECTRON IMPACT  
PHYS REV. VOL 129, 229. (1962)
- 1022 SMITH K, MCEACHMAN R P, FRASER P A EFFECT OF VIRTUAL EXCITATION OF THE 2S STATE ON THE ELASTIC SCATTERING OF ELECTRONS BY ATOMIC HYDROGEN  
PHYS REV. VOL 129, 553. (1962)
- 1023 SALMONA A, SEATON M J ELECTRON COLLISIONS WITH NA ATOMS  
PROC PHYS SOC LONDON. VOL 77, 617. (1961)
- 1024 MOISEWITSCH B L ELASTIC SCATTERING OF SLOW ELECTRONS BY HELIUM ATOMS  
PROC PHYS SOC LONDON. VOL 77, 721. (1961)
- 1025 KINGSTON A E, SKINNER B B THE ELASTIC SCATTERING OF ELECTRONS AND POSITRONS BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON. VOL 77, 724. (1961)
- 1026 SARAPH H APPLICATION OF THE SCHWINGER VARIATIONAL METHOD TO ZERO-ENERGY ELECTRON-HYDROGEN SCATTERING  
PROC PHYS SOC LONDON. VOL 77, 827. (1961)
- 1027 HIGGINSON G S, KERR L M THE 2 TRIPLET S EXCITATION IN HELIUM  
PROC PHYS SOC LONDON. VOL 77, 866. (1961)
- 1030 TENKIN A, LAMKIN J C APPLICATION OF THE METHOD OF POLARIZED ORBITALS TO THE SCATTERING OF ELECTRONS FROM HYDROGEN  
PHYS REV. VOL 121, 788. (1961)
- 1031 GILBODY M B, STEBBINGS R F, FITE W L COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS. VI. ANGULAR DISTRIBUTION IN ELASTIC SCATTERING  
PHYS REV. VOL 121, 794. (1961)
- 1033 LIPPMANN R A, SCHEY H M OPTICAL-MODEL ANALYSIS OF LOW-ENERGY ELECTRON-HYDROGEN SCATTERING  
PHYS REV. VOL 121, 1112. (1961)
- 1034 FOWER S N, HALL B M STRUCTURE IN THE IONIZATION NEAR THRESHOLD OF RARE GASES BY ELECTRON IMPACT  
PHYS REV. VOL 122, 512. (1961)
- 1037 HUMMER D G, SEATON M J EXCITATION OF M 2S BY ELECTRON IMPACT  
PHYS REV LETTERS. VOL 6, 471. (1961)
- 1038 KANEKO Y IONIZATION EFFICIENCY CURVES FOR A+, KR+, N2+, AND C O+ BY ELECTRON IMPACT  
J PHYS SOC JAPAN. VOL 16, 1587. (1961)
- 1039 KANEKO Y SINGLE AND DOUBLE IONIZATION OF NA, K AND MG BY ELECTRON IMPACT  
J PHYS SOC JAPAN. VOL 16, 2288. (1961)
- 1040 ZAPESOCHNYI I P, SHIMON L L EXCITATION FUNCTIONS OF THE SPECTRAL LINES OF CESIUM  
OPT SPECTRY USSR ENGLISH TRANSL. VOL 16, 594. (1964)
- 1041 BULEWICZ E M ELECTRON-MOLECULE AND ELECTRON-ATOM COLLISION CROSS SECTIONS FROM A CYCLOTRON RESONANCE STUDY OF FLAME GASES  
J CHEM PHYS. VOL 36, 385. (1962)
- 1043 FROST I S, PHELPS A V MOLECULAR EXCITATION OF HYDROGEN AND NITROGEN FROM ELECTRON SWARM EXPERIMENTS  
(IN) PROCEEDINGS OF THE FIFTH INTERNATIONAL CONFERENCE ON IONIZATION PHENOMENA IN GASES (MUNICH, 28 AUGUST - 1 SEPTEMBER 1961) M MAECKER, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, VOL 1, 192. 1962
- 1044 DRAWIN H M ZUR FORMELMASSIGEN DARSTELLUNG DER IONISIERUNGSQUERSCHNITTE GEGENUBER ELEKTROENSTOSS  
Z PHYSIK. VOL 164, 513. (1961)
- 1045 KANEKO Y, KANOHATA I SINGLE AND DOUBLE IONIZATION OF CA BY ELECTRON IMPACT  
J PHYS SOC JAPAN. VOL 16, 1822. (1963)
- 1046 MALIK F B, TREFFTZ E IONISATIONSQUERSCHNITT VON O V GEGENUBER ELEKTROENSTOSS UNTER TEILWEISER BERUECKSICHTIGUNG DES AUSTAUSCHS  
Z NATURFORSCH. VOL 16, 583. (1961)
- 1047 KISHKO S M, SKUBENICH V V INVESTIGATION OF THE BANDS OF CARBON DIOXIDE EXCITED BY ELECTRON IMPACT  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL. VOL 27, 1023. (1963)
- 1048 MUKHERJEE S C POTENTIAL FUNCTION OF HELIUM-LIKE ATOMS AND ELECTRON SCATTERING BY THE BORN APPROXIMATION  
INDIAN J PHYS. VOL 35, 133. (1961)

- 1049 ST JOHN R M, MILLER F L, LIN CHUN C  
ABSOLUTE ELECTRON EXCITATION CROSS SECTIONS OF HELIUM  
PHYS REV, VOL 134, A888, (1964)
- 1050 SCANLON J M, MILFORD S N  
APPROXIMATE CROSS-SECTIONS FOR INELASTIC COLLISIONS OF ELECTRONS WITH ATOMS. II. FORBIDDEN TRANSITIONS  
ASTROPHYS J, VOL 134, 724, (1961)
- 1051 TENKIN A  
NONADIABATIC THEORY OF ELECTRON-HYDROGEN SCATTERING  
PHYS REV, VOL 126, 134, (1962)
- 1052 SALMONA A  
CALCUL DE LA DIFFUSION ELASTIQUE D'UN ELECTRON LENT PAR UN ATOME DE SODIUM NEUTRE DANS L'ETA / FONDAMENTAL  
COMPT REND, VOL 252, 947, (1961)
- 1053 VAN RESEMORTER H  
SECTION D'EXCITATION PAR CHOCS ELECTRONIQUES DU MAGNESIUM IONISE  
COMPT REND, VOL 252, 2514, (1961)
- 1054 VAN RESEMORTER H  
L'EXCITATION PAR CHOC DE LA TRANSITION 4S - 3D DE CA.  
COMPT REND, VOL 252, 2667, (1961)
- 1055 PEEK J M  
INELASTIC SCATTERING OF ELECTRONS BY THE HYDROGEN MOLECULE ION  
PHYS REV, VOL 136, A877, (1964)
- 1056 INOKUTI M  
ELASTIC SCATTERING OF FAST ELECTRONS BY THE HELIUM ATOM AND THE INTERELECTRONIC CORRELATION  
PROGR THEORET PHYS KYOTO, VOL 25, 717, (1961)
- 1057 COOPER J W, MARTIN J B  
ELECTRON PHOTODETACHMENT FROM IONS AND ELASTIC COLLISION CROSS SECTIONS FOR O, C, CL, AND F  
PHYS REV, VOL 126, 1482, (1962)
- 1058 KULANDER J L, EMMAUEL C B  
IONIZATION OF FE XIV BY ELECTRON IMPACT  
PHYS FLUIDS, VOL 6, 1656, (1963)
- 1059 BIBERMAN L M, NORMAN G E  
SEMI-EMPERICAL METHOD OF CALCULATING THE CROSS SECTION FOR ELASTIC SCATTERING OF SLOW ELECTRONS BY ATOMS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 18, 1352, (1964)
- 1060 VRIENS L  
CALCULATION OF ABSOLUTE IONISATION CROSS SECTIONS OF HE, HE+, HE++, HE-, HE+, HE++, AR, AR+, AR++, HG AND HG+  
PHYS LETTERS, VOL 8, 268, (1964)
- 1061 VAINSHTEIN L, PRESNYAKOV L, SOBELMAN I  
ON A CERTAIN MODEL FOR CALCULATION OF THE EFFECTIVE CROSS SECTIONS FOR EXCITATION OF ATOMS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 18, 1383, (1964)
- 1062 FROST L S, PHELPS A V  
MOMENTUM-TRANSFER CROSS SECTIONS FOR SLOW ELECTRONS IN HE, AM, KR AND Xe FROM TRANSPORT COEFFICIENTS  
PHYS REV, VOL 136, 4153, (1964)
- 1063 HANSEN L K  
CROSS SECTION OF THE ELECTRON-INDUCED 6S-6P TRANSITION IN CESIUM  
J APPL PHYS, VOL 35, 254, (1964)
- 1064 BIONDI M A, FOX R E  
DISSOCIATIVE ATTACHMENT OF ELECTRONS IN IODINE. III, DISCUSSION.  
PHYS REV, VOL 109, 2012, (1958)
- 1065 BOERSCH H, GEIGER J, STICKEL W  
ANREGUNG VON MOLEKULSCHWINGUNGEN DURCH SCHNELLE ELECTRONEN  
PHYS LETTERS, VOL 10, 245, (1964)
- 1066 CURRAN R K  
NEGATIVE ION FORMATION IN OZONE  
J CHEM PHYS, VOL 35, 1849, (1961)
- 1067 CURRAN R K, FOX R E  
MASS SPECTROMETER INVESTIGATION OF IONIZATION OF N2O BY ELECTRON IMPACT  
J CHEM PHYS, VOL 34, 1590, (1961)
- 1068 DORMAN F W, MORRISON J D  
DOUBLE AND TRIPLE IONIZATION IN MOLECULES INDUCED BY ELECTRON IMPACT  
J CHEM PHYS, VOL 35, 874, (1961)
- 1069 DORMAN F W, MORRISON J D, NICHOLSON A J C  
PROBABILITY OF MULTIPLE IONIZATION BY ELECTRON IMPACT  
J CHEM PHYS, VOL 31, 1315, (1959)
- 1070 DORMAN F W, MORRISON J D  
IONIZATION POTENTIALS OF MULTIPLY CHARGED KRYPTON, XENON, AND MERCURY  
J CHEM PHYS, VOL 34, 1407, (1961)
- 1071 UNIDVAR K  
IONIZATION OF THE HYDROGEN ATOM BY ELECTRON COLLISION  
NASA GODDARD SPACE FLIGHT CENTER, GREENBELT, MARYLAND  
PREPRINT X-641-64-192, 1964, 43 PAGES PLUS TABLES AND FIGURES



- 1072 HUGHES R H, HENDRICKSON G B  
EXCITATION OF THE 2P LEVEL IN LITHIUM BY ELECTRON IMPACT  
J OPT SOC AM, VOL 54, 1494, (1964)
- 1073 MCFARLAND R H  
PRODUCTION AND EFFECTS OF LOW-ENERGY ELECTRONS IN HELIUM  
PHYS REV, VOL 136, A1240, (1964)
- 1074 SOMERVILLE W B  
CROSS SECTIONS FOR ELECTRON-HYDROGEN ATOM COLLISIONS IN THE BORN APPROXIMATION TO THE REACTANCE MATRIX  
PROC PHYS SOC LONDON, VOL 82, 446, (1963)
- 1075 SILVERMAN S M, LASSETTRE E N  
COLLISION CROSS SECTIONS FOR OXYGEN IN THE EXCITATION ENERGY RANGE 16 TO 80 V  
J CHEM PHYS, VOL 40, 2922, (1964)
- 1076 ZAPESOCHNYI I P, FELTSAN P V  
NEW DATA ON THE EXCITATION FUNCTIONS OF INERT GASES  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 27, 1015, (1963)
- 1077 ZAPESOCHNYI I P, SHPENIK O B  
NEW EXPERIMENTAL TECHNIQUE FOR INVESTIGATING IN ELECTRON-ATOM COLLISIONS  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 27, 1009, (1963)
- 1078 ZAPESOCHNYI I P, SHIMON L L  
EXCITATION FUNCTIONS OF SOME ALKALI METAL ATOMS  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 27, 1012, (1963)
- 1079 ZAPESOCHNYI I P, SHEVERA V S  
FINE STRUCTURE OF THE OPTICAL FUNCTIONS OF ZN, CD AND HG ATOMS  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 27, 1018, (1963)
- 1080 BURKE P G, SMITH K, MCVICAR D D  
SCATTERING OF ELECTRONS BY IONIZED HELIUM  
PROC PHYS SOC LONDON, VOL 84, 749, (1964)
- 1081 LYUBIMOV A P, PAVLOV S I, RAKHOVSKII V I, ZAITSEVA N G  
PROCEDURE FOR MEASURING THE IONIZATION CROSS SECTIONS AND IONIZATION COEFFICIENTS OF METAL ATOMS  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 27, 1033, (1963)
- 1082 NJOLSNES R C, SAMPSON O H  
DISTORTED-WAVE CALCULATION OF ROTATIONAL EXCITATION OF N<sub>2</sub> BY SLOW ELECTRONS  
PHYS REV LETTERS, VOL 13, 812, (1964)
- 1083 WADDINGTON J F  
THE EXCHANGE SCATTERING OF A SLOW ELECTRON BY THE HYDROGEN ATOM  
PROC PHYS SOC LONDON, VOL 84, 47, (1964)
- 1084 ROSENBERG I, SPRUCH L, CHALLEY T F  
UPPER BOUNDS ON ELECTRON-ATOMIC HYDROGEN SCATTERING LENGTHS  
PHYS REV, VOL 119, 144, (1960)
- 1085 KUYATT C F, MIELCZAREK S R, SIMPSON J A  
ENERGY LOSSES AND ELASTIC RESONANCES IN ELECTRON SCATTERING FROM N<sub>2</sub>  
PHYS REV LETTERS, VOL 12, 293, (1964)
- 1087 VAINSHTEIN L  
ELASTIC SCATTERING AND FREE-FREE TRANSITIONS OF ELECTRONS IN THE FIELD OF ATOMIC HYDROGEN  
DOKL AD FIZ 38, VOL 3, 119, (1963)
- 1088 FLEMING R J, HIGGINSON G S  
A REMEASUREMENT OF THE 2 TRIPLET S EXCITATION CROSS SECTION IN HELIUM  
PROC PHYS SOC LONDON, VOL 84, 531, (1964)
- 1089 MCGONAN W, CLARKE E M, STEBBINGS R F, MANSON M P  
ELECTRON- AND PHOTON-IMPACT IONIZATION OF O<sub>2</sub>  
PHYS REV LETTERS, VOL 13, 620, (1964)
- 1090 SCHULZ G J, PHILBRICK J W  
RESONANCES IN THE INELASTIC CROSS SECTION OF HELIUM  
PHYS REV LETTERS, VOL 13, 477, (1964)
- 1091 SILVERMAN S M, LASSETTRE E N  
COMPARISON OF THEORETICAL AND EXPERIMENTAL ELECTRON COLLISION CROSS SECTIONS FOR THREE EXCITATIONS IN HELIUM  
J CHEM PHYS, VOL 29, 891, (1958)
- 1092 SLOAN I H  
THE METHOD OF POLARIZED ORBITALS FOR THE ELASTIC SCATTERING OF SLOW ELECTRONS BY IONIZED HELIUM AND ATOMIC HYDROGEN  
PROC ROY SOC LONDON SER A, VOL 281, 151, (1964)
- 1093 TAKAYANAGI K, GELTMAN S  
EXCITATION OF MOLECULAR ROTATION BY SLOW ELECTRONS  
PHYS LETTERS, VOL 13, 139, (1964)
- 1094 TIEN P K, MACHAIR D, HODGES M J  
ELECTRON BEAM EXCITATION OF GAS LASER TRANSITIONS AND MEASUREMENTS OF CROSS SECTIONS OF EXCITATION  
PHYS REV LETTERS, VOL 12, 38, (1964)
- 1095 BLEAKNEY W  
A NEW METHOD OF POSITIVE RAY ANALYSIS AND ITS APPLICATION TO THE MEASUREMENT OF IONIZATION POTENTIALS IN MERCURY VAPOR  
PHYS REV, VOL 34, 197, (1929)

- 1096 HOGNESS T R, HARKNESS R W THE IONIZATION OF CARBON MONOXIDE BY CONTROLLED ELECTRON IMPACT, INTERPRETED BY THE MASS SPECTROGRAPH  
PHYS REV. VOL 32, 934. (1928)
- 1097 VINKALNS I ZH, KANULE E M, OBEKOV V D ELASTIC SCATTERING OF ELECTRONS BY LITHIUM ATOMS IN THE POLARIZATION-EXCHANGE APPROXIMATION  
OPT SPECTRY USSR ENGLISH transl. VOL 17, 105. (1964)
- 1100 BECKER P M, LANPE F W STRUCTURE IN THE IONIZATION EFFICIENCY CURVES (AR2) BY PULSED MASS SPECTROMETRY  
J AM CHEM SOC, VOL 86, 5347. (1964)
- 1102 McDOWELL M R C, MYERSCOUGH V P ELASTIC SCATTERING OF SLOW ELECTRONS BY CARBON. THE CONTRIBUTION OF DOUBLET SPIN STATES  
PROC PHYS SOC LONDON, VOL 84, 622. (1964)
- 1103 YAVORSKY B STEP-WISE PROCESSES IN NON-ELASTIC INTERACTION BETWEEN ATOMS AND ELECTRONS  
ZH EKSPERIM I TEOR FIZ, VOL 17, 315. (1947)
- 1104 MCFARLAND R M, KINNEY J D ABSOLUTE IONIZATION CROSS SECTIONS OF LITHIUM AND OTHER ALKALI METAL ATOMS BY ELECTRONS  
PHYS REV, VOL 137, A105A. (1965)
- 1105 ENGLANDER-GOLDEN P, RAPP D TOTAL CROSS SECTIONS FOR IONIZATION OF ATOMS AND MOLECULES BY ELECTRON IMPACT  
REPORT, LOCKHEED MISSILES AND SPACE COMPANY, PALO ALTO, CALIFORNIA, LMSC-6-74-64-12, 1964, 50 PAGES
- 1106 BOKSENBERR A ELECTRON COLLISION PROCESSES IN DISSOCIATED MOLECULAR GASES  
THESIS, UNIVERSITY OF LONDON, 1961, 127 PAGES
- 1107 MORRISON J D THRESHOLD LAWS FOR PROCESSES OF AUTOIONIZATION  
J CHEM PHYS, VOL 40, 2485. (1964)
- 1108 DORHAN F M, MORRISON J D IONIZATION POTENTIALS OF DOUBLY CHARGED OXYGEN AND NITROGEN  
J CHEM PHYS, VOL 39, 1974. (1963)
- 1109 CUNNINGHAM G M, LIN LUN C ELECTRON-EXCITATION CROSS SECTIONS FOR HYDROGEN STATES WITH LARGE PRINCIPAL QUANTUM NUMBERS  
J CHEM PHYS, VOL 41, 3248. (1964)
- 1110 MYERSCOUGH V P, McDOWELL M R C THE ELASTIC SCATTERING OF SLOW ELECTRONS BY CARBON  
PROC PHYS SOC LONDON, VOL 84, 231. (1964)
- 1111 REICHERT E DIE WINKELVERTEILUNG IM BEREICH 30 BIS 155 (DEG) VON ELASTISCH AN GOLDDAMPF GESTREUTEN ELEKTROEN MIT ENERGIEEN ZWISCHEN 150 UND 1900 EV  
Z PHYSIK, VOL 173, 392. (1963)
- 1112 MALIK F B, TREFFTZ E THE POTENTIAL MODEL TREATMENT OF THE SCATTERING OF ELECTRONS BY ATOMS AND THE EXISTENCE OF NEGATIVE IONS  
Z NATURFORSCH, VOL 16, 492. (1961)
- 1115 OCHKUR V I, PETRUNKIN A M THE CLASSICAL CALCULATION OF THE PROBABILITIES OF EXCITATION AND IONIZATION OF ATOMS BY ELECTRON IMPACT  
OPT SPECTRY USSR ENGLISH transl. VOL 14, 245. (1963)
- 1116 RUDOLPH P, MELTON C E, BEGUN G M COMMENTS AND ERRATA - FORMATION OF N O- IN NITRIC OXIDE AND NITROUS OXIDE BY ELECTRON IMPACT  
J CHEM PHYS, VOL 30, 584. (1959)
- 1117 MUSCHLITZ E E, BAILEY T L NEGATIVE ION FORMATION IN HYDROGEN PEROXIDE AND WATER VAPOR, THE PEROXYDROXIDE ION  
J PHYS CHEM, VOL 60, 681. (1956)
- 1118 HARRIOTT J, CRAIGS J D IONIZATION AND DISSOCIATION BY ELECTRON IMPACT. II. BORON TRIFLUORIDE AND BORON TRICHLORIDE  
J ELECTRON CONTROL, VOL 3, 194. (1957)
- 1119 FOX R E NEGATIVE ION FORMATION IN HYDROGEN CHLORIDE BY ELECTRON IMPACT  
J CHEM PHYS, VOL 26, 1241. (1957)
- 1120 FROST D C, McDOWELL C FORMATION OF I- ION FROM I2 BY RESONANCE CAPTURE  
J CHEM PHYS, VOL 29, 964. (1958)
- 1121 MALIK F B ELASTIC SCATTERING OF LOW ENERGY POSITRONS BY ATOMS  
Z NATURFORSCH, VOL 16, 500. (1961)
- 1122 VAN REGENMORTER M METHODES DE CALCUL DES SECTIONS D'EXCITATION PAR CHOCES ELECTRONIQUES  
ANN ASTRONPHYS, VOL 23, 917. (1966)

- 1180 MASSEY H S W, BATES O R THE PROPERTIES OF NEUTRAL AND IONIZED ATOMIC OXYGEN AND THEIR INFLUENCE ON THE UPPER ATMOSPHERE  
REPT PROG PHYS, VOL 9, 62, (1943)
- 1190 HU T ON THE SATELLITE LINES IN ATOMIC SPECTRA AND THE EXCITATION OF ELECTRONS FROM CLOSED SHELLS  
PHYS REV, VOL 58, 1114, (1946)
- 1191 SHAW C M, SNYDER T M ELECTRON SCATTERING IN HYDROGEN GAS  
PHYS REV, VOL 58, 600, (1946)
- 1192 DRACHMAN R J POSITRON-HYDROGEN SCATTERING AT LOW ENERGIES  
PHYS REV, VOL 138, A1587, (1965)
- 1195 TEUTSCH W B, HUGHES V W EFFECT OF AN ELECTRIC FIELD ON POSITRONIUM FORMATION IN GASES - THEORETICAL  
PHYS REV, VOL 103, 1266, (1956)
- 1196 MANDER S, HUGHES V W, WU C S, BENNETT W EFFECT OF AN ELECTRIC FIELD ON POSITRONIUM FORMATION IN GASES - EXPERIMENTAL  
PHYS REV, VOL 103, 1258, (1956)
- 1197 BRANSCOMB L PHOTODETACHMENT OF ATMOSPHERIC NEGATIVE IONS (IN) THRESHOLD OF SPACE. THE PROCEEDINGS OF THE CONFERENCE ON CHEMICAL AERONOMY (CAMBRIDGE, MASSACHUSETTS, 25-26 JUNE 1956) M ZELIKOFF, EDITOR, PERGAMON PRESS, NEW YORK, PAGE 131, 1957
- 1199 MUKHERJEE S C SCATTERING OF ELECTRON BY THOMAS-FERMI POTENTIAL  
INDIAN J PHYS, VOL 35, 165, (1961)
- 1205 MEYER V D, LASSETTRE E N OSCILLATOR STRENGTHS OF SEVERAL PEAKS IN THE ELECTRON-IMPACT SPECTRUM OF CARBON DIOXIDE. SPIN-ORBIT COUPLING  
J CHEM PHYS, VOL 42, 3476, (1965)
- 1211 MOISEWITSCH M L ELASTIC SCATTERING OF SLOW POSITRONS BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON, VOL 72, 139, (1958)
- 1212 RECKEN P M DOUBLE EXCITATION OF HELIUM BY ELECTRONIC IMPACT  
THESIS, UNIVERSITY OF MINNESOTA, 1964, 63 PAGES  
UNIVERSITY MICROFILMS, INC., ANN ARBOR, MICHIGAN, NO. 64-9473
- 1213 MOHLER F L, BOECKNER C PHOTOIONIZATION OF ALKALI VAPORS  
J RES NATL BUR STD, VOL 3, 303, (1929)
- 1215 HUTCHISON D A EXPERIMENTAL THRESHOLD LAWS FOR IONIZATION IN THE RARE GASES (IN) ATOMIC COLLISION PROCESSES, M P C MCDOWELL, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 443, 1964, PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 1216 ALLEN L N THE COLLISIONAL EXCITATION OF THE LAMBOA 3727 RADIATION OF O II  
PUBL ASTRON SOC PACIFIC, VOL 60, 317, (1968)
- 1217 BRINK G ABSOLUTE IONIZATION CROSS SECTIONS OF THE ALKALI METALS  
PHYS REV, VOL 134, A345, (1964)
- 1224 SIEVENSON D IONIZATION AND DISSOCIATION BY ELECTRON IMPACT - CYANOGEN, HYDROGEN CYANIDE, AND CYANOGEN CHLORIDE AND THE DISSOCIATION ENERGY OF CYANOGEN  
J CHEM PHYS, VOL 18, 1347, (1950)
- 1230 MCDOWELL C, WARREN J W THE IONIZATION AND DISSOCIATION OF CYANOGEN AND METHYL CYANIDE BY ELECTRON IMPACT  
TRANS FARADAY SOC, VOL 48, 1684, (1952)
- 1231 CRAGGS J D, MCDOWELL C, WARREN J W ELECTRON CAPTURE PROCESSES IN POLYATOMIC MOLECULES  
TRANS FARADAY SOC, VOL 48, 1693, (1952)
- 1233 FRISH S E, ZAPESCHNYI I P THE ROLE OF CASCADE TRANSITIONS IN THE EXCITATION OF SPECTRAL LINES  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 19, 1, (1956)
- 1239 AMEARN A J, HANNAY N B THE FORMATION OF NEGATIVE IONS OF SULFUR HEXAFLUORIDE  
J CHEM PHYS, VOL 21, 119, (1953)
- 1244 MORRISON J D STUDIES OF IONIZATION EFFICIENCY. PART III. THE DETECTION AND INTERPRETATION OF FINE STRUCTURE  
J CHEM PHYS, VOL 21, 1767, (1953)
- 1246 STAUFFER A D, MCDOWELL M A C THE IMPACT PARAMETER METHOD FOR ELECTRON EXCITATION OF ELECTRIC QUADRUPOLE TRANSITIONS  
PROC PHYS SOC LONDON, VOL 85, 61, (1965)

- 1251 BARNES L. L., LANE H. F., LIN CHUN C. ELECTRON EXCITATION CROSS SECTION OF THE 3 DOUBLET S TO 3 DOUBLET P TRANSITION OF SODIUM  
PHYS REV. VOL 137. A308. (1965)
- 1256 WILLIAMSON J. M., McDOWELL H. R. C. ELASTIC SCATTERING OF SLOW ELECTRONS BY HELIUM  
PROC PHYS SOC LONDON. VOL 85. 719. (1965)
- 1257 NOISEWITZCH U. L., PERMIN R. THE 1S-2P EXCITATION OF HYDROGEN ATOMS  
PROC PHYS SOC LONDON. VOL 85. 51. (1965)
- 1261 MANN J. B. IONIZATION OF U, U O, AND U O<sub>2</sub> BY ELECTRON IMPACT  
J CHEM PHYS. VOL 40. 1672. (1964)
- 1262 PRASAD S. S. ELECTRON EXCHANGE IN IMPACT IONIZATION OF ATOMIC HYDROGEN  
PROC PHYS SOC LONDON. VOL 85. 57. (1965)
- 1263 FROST D. C., McDOWELL C. NEGATIVE ION FORMATION BY AN ELECTRON CAPTURE PROCESS IN NITRIC OXIDE. DISSOCIATION ENERGY OF THE NITRIC OXIDE MOLECULE  
J CHEM PHYS. VOL 29. 1424. (1958)
- 1265 JONES E. A. INELASTIC SCATTERING OF ELECTRONS BY MOLECULAR HYDROGEN  
THESIS, OHIO STATE UNIVERSITY, 1968. 112 PAGES
- 1266 SMITH A. C. H., ROTH E. W., CAPLINBER E., MEYHABER R., TRUJILLO S. M. ELECTRON IMPACT IONIZATION OF ATOMIC NITROGEN  
PHYS REV. VOL 127. 1647. (1962)
- 1270 GRON V. E. FORMATION OF NEGATIVE IONS IN SO CL<sub>3</sub>  
J CHEM PHYS. VOL 39. 977. (1963)
- 1272 SHELTON J. W., DURAN J. V. SEMICLASSICAL CALCULATION OF INELASTIC CROSS SECTIONS FOR ELECTRON-CESIUM ATOMIC COLLISIONS  
J APPL PHYS. VOL 36. 650. (1965)
- 1273 PEACH G. IONIZATION OF HYDROGEN, HELIUM, LITHIUM AND BERYLLIUM BY ELECTRON AND PROTON IMPACT  
PROC PHYS SOC LONDON. VOL 85. 709. (1965)
- 1275 VALASEK J. RELATIVE INTENSITIES OF SOME LINES IN THE MERCURY SPECTRUM  
PHYS REV. VOL 29. 817. (1927)
- 1277 HUGHES A. L., WEST S. S. SCATTERING OF FAST ELECTRONS BY HELIUM  
PHYS REV. VOL 50. 320. (1936)
- 1279 MEY W., LEIPUNSKI A. BILDUNG NEGATIVER IONEN EINIGER STOFFE  
Z PHYSIK. VOL 66. 669. (1930)
- 1281 SCHRAM D. L., DE MEER F. J., VAN DER WIEL H. J., KISTEMAKER J. IONIZATION CROSS-SECTIONS FOR ELECTRONS (0.6-20 KEV) IN NOBLE AND DIATOMIC GASES  
PHYSICA. VOL 31. 94. (1965)
- 1282 ROBINSON L. B. THEORETICAL ELASTIC COLLISION FREQUENCY BETWEEN ELECTRONS AND NEUTRAL ATOMS IN A CESIUM PLASMA  
PHYS REV. VOL 127. 2076. (1962)
- 1283 KAR K. C. ON THE ELASTIC SCATTERING BY HYDROGEN AND HELIUM  
PHIL MAG. VOL 24. 972. (1937)
- 1286 CHILDS E. C., WOODCOCK A. M. THE SCATTERING OF SLOW ELECTRONS BY ORGANIC MOLECULES. I. ACETYLENE, ETHYLENE, AND ETHANE  
PROC ROY SOC LONDON SER A. VOL 146. 199. (1934)
- 1287 HILL S., WOODCOCK A. M. THE ELASTIC SCATTERING OF SLOW ELECTRONS FROM ORGANIC MOLECULES  
PROC ROY SOC LONDON SER A. VOL 155. 331. (1936)
- 1289 SCHULZ G. J. CROSS SECTIONS AND ELECTRON AFFINITY FOR O<sup>-</sup> IONS FROM O<sub>2</sub>, C O, AND C O<sub>2</sub> BY ELECTRON IMPACT  
PHYS REV. VOL 128. 178. (1962)
- 1290 ROZBACHEV K. I. STEPWISE EXCITATION OF MERCURY ATOMS BY ELECTRON IMPACT  
OPT. I SPECTROKOPIYA. VOL 4. 849. (1958)  
POLISH SUMMARY IN 141847T-2 OBTAINABLE FROM OFFICE OF TECHNICAL SERVICES, U.S. DEPT. OF COMMERCE, WASHINGTON, D.C.
- 1292 BRIGLIA D. D., RAPP D. IONIZATION OF THE HYDROGEN MOLECULE BY ELECTRON IMPACT NEAR THRESHOLD  
PHYS REV LETTERS. VOL 14. 245. (1965)
- 1294 HUGHES A. L., BILINSKY S. CALCULATION OF THE ELASTIC SCATTERING OF ELECTRONS IN KRYPTON  
PHYS REV. VOL 48. 188. (1935)

- 1296 WILLIAMS S E THE EFFICIENCY OF EXCITATION OF THE NITROGEN FIRST POSITIVE BANDS BY ELECTRON IMPACT  
PROC PHYS SOC LONDON A, VOL 47, 420, (1935)
- 1297 JONES F L ELECTRON ENERGIES AND EXCITATION IN THE HELIUM POSITIVE COLUMN  
PROC PHYS SOC LONDON A, VOL 48, 513, (1936)
- 1298 LANGSTROTH G O EXCITATION AND EMISSION IN THE NITROGEN BAND SPECTRUM  
PROC ROY SOC LONDON SER A, VOL 150, 371, (1935)
- 1299 McDOWELL H R C, MYERSCOUGH V P, PEACH G IONIZATION OF LITHIUM BY ELECTRONS  
PROC PHYS SOC LONDON, VOL 85, 703, (1965)
- 1300 MASSEY H S W, SMITH R A NEGATIVE ATOMIC IONS  
PROC ROY SOC LONDON SER A, VOL 155, 472, (1936)
- 1301 OLINSTEAD J, NEWTON A S, STREET I DETERMINATION OF THE EXCITATION FUNCTIONS FOR FORMATION OF METASTABLE STATES OF SOME RARE GASES AND DIATOMIC MOLECULES BY ELECTRON IMPACT  
J CHEM PHYS, VOL 42, 2371, (1965)
- 1302 SLOAN I M THE IONIZATION OF NEUTRAL HELIUM BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 85, 435, (1965)
- 1303 ZEIGER J STREUUNG VON 25 KEV-ELEKTROEN AN GASEN, II: STREUUNG AN MOLEKULAREN WASSERSTOFF  
Z PHYSIK, VOL 181, 413, (1964)
- 1304 CHAMBERLAIN G E MULTICHANNEL RESONANCES IN THE FORWARD SCATTERING OF ELECTRONS BY HELIUM  
PHYS REV LETTERS, VOL 14, 501, (1965)
- 1305 BELT O ETUDE DES DIFFERENTS ETATS D'UN SYSTEME (ION + ELECTRON)  
ANM ASTROPHYS, VOL 27, 499, (1964)
- 1306 GHOSH M ON THE THEORY OF ELECTRON SCATTERING BY ATOMS  
PHIL MAG, VOL 20, 234, (1935)
- 1307 SCHULZ G J, DOWELL J T EXCITATION OF VIBRATIONAL AND ELECTRONIC LEVELS IN O<sub>2</sub> BY ELECTRON IMPACT  
PHYS REV, VOL 128, 174, (1962)
- 1311 ROSS J E H THE CALCULATION OF THE ELASTIC SCATTERING OF ELECTRONS BY MOLECULAR HYDROGEN  
PHIL MAG, VOL 26, 32, (1938)
- 1312 LANGSTROTH G O THE EXCITATION OF BAND SPECTRA - ROTATIONAL STRUCTURE  
CAN J RESEARCH, VOL 12, 6, (1935)
- 1316 LOCHTE-HOLTGREVEN W EMISSION OF THE NEGATIVE HYDROGEN ION  
RUSL ACAD SCI USSR PHYS SER ENGL transl, VOL 22, 1299, (1958)
- 1319 VELORE V EXCITATION OF 3 DOUBLET P LEVEL OF NA ATOM BY ELECTRON IMPACT  
LATVIJAS PSR ZINATNU AKAD VESTIS, VOL 5, 105, (1956)
- 1323 YAKHONTOVA V E THE PART PLAYED BY CASCADE TRANSITIONS IN THE EXCITATION OF HELIUM LINES  
VESTN Leningr UNIV SER FIZ I KHIM, VOL 14, 27, (1959)  
TRANSLATED BY M ARCHER, U S A F A RESEARCH GROUP, ATOMIC ENERGY RESEARCH ESTABLISHMENT, HARWELL, ENGLAND
- 1324 BOGDANOVA I MEASUREMENT OF OPTICAL EXCITATION FUNCTIONS IN RETARDED ELECTRIC FIELDS  
VESTN Leningr UNIV SER FIZ I KHIM, VOL 14, 15, (1959)
- 1325 GUK SIN SAN, DEYATOV A M DETERMINATION OF EXCITATION FUNCTIONS. I. EXCITATION FUNCTIONS OF SEVERAL SPECTRAL LINES OF KN AND RE  
VESTN MOSK UNIV, VOL 1, 63, (1957)
- 1329 FOX R E IONIZATION CROSS SECTION NEAR THRESHOLD BY ELECTRON IMPACT  
J CHEM PHYS, VOL 35, 1379, (1961)
- 1331 MERZENBERG A, MANDL F VIBRATIONAL EXCITATION OF MOLECULES BY RESONANCE SCATTERING OF ELECTRONS  
PROC ROY SOC LONDON SER A, VOL 270, 48, (1962)
- 1339 MADEISHI T, MCARRIS O A, NIERENBERG W A RADIO-FREQUENCY RESONANCE OF THE METASTABLE STATE OF NEON PRODUCED AND ALIGNED BY ELECTRON IMPACT  
PHYS REV, VOL 138, 4983, (1968)

- 1340 PURKE P G, SMITH K,  
MCVICAR D D  
THE SCATTERING OF ELECTRONS BY  $He^+$   
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 339, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 1341 DALBARNO A, HOFFETT R J  
THE ROTATIONAL EXCITATION OF MOLECULAR NITROGEN BY SLOW ELECTRONS  
PHOC NATL ACAD SCI INDIA SECT A, VOL 33, 511, (1963)
- 1342 CALLAWAY J, CHOW R K M  
EXCITATION OF THE HYDROGEN MOLECULAR ION BY ELECTRON IMPACT  
PHYS REV, VOL 137, A1662, (1965)
- 1343 CROWN J C, RUSSEK A  
ELECTRON-ALKALI-ATOM INTERACTION POTENTIAL AND ELASTIC-SCATTERING  
CROSS SECTION  
PHYS REV, VOL 138, A669, (1965)
- 1344 BIONDI M A, CONNOR T H,  
VELLER C S  
RECOMBINATION OF MOLECULAR POSITIVE IONS WITH ELECTRONS  
TECHNICAL REPORT NO. 3, ATOMIC AND PLASMA PHYSICS LABORATORY,  
UNIVERSITY OF PITTSBURGH, AD-434 967, 1964, 21 PAGES
- 1345 LEE E T P, LIN CHUN C  
THEORY OF THE EXCITATION OF THE 4686 ANGSTROM LINE OF  $He^+$  BY  
ELECTRON IMPACT  
PHYS REV, VOL 138, A301, (1965)
- 1346 BALLING L C, PIPKIN F M  
SPIN EXCHANGE IN A CESIUM-ELECTRON SYSTEM  
PHYS REV, VOL 136, A46, (1964)
- 1347 KUYATT C E, SIMPSON J A,  
MIELCZAREK S R  
ELASTIC RESONANCES IN ELECTRON SCATTERING FROM  $He$ ,  $He^+$ ,  $Ar$ ,  $Kr$ ,  $Xe$ ,  
AND  $Hg$   
PHYS REV, VOL 138, A385, (1965)
- 1348 GOLDAN P D, GOLDSTEIN L  
ELECTRON INTERACTIONS IN CRYOGENIC HELIUM PLASMAS  
PHYS REV, VOL 138, A39, (1965)
- 1372 RAPP D, BRIGLIA D D,  
SHARP T E  
ON THE THEORETICAL INTERPRETATION OF RESONANCE DISSOCIATIVE  
ATTACHMENT CROSS SECTIONS  
REPORT, LOCKHEED MISSILES AND SPACE COMPANY, PALO ALTO, CALIFORNIA,  
LMSC-6-74-64-45, 1964, 35 PAGES
- 1373 SIMPSON J A, CHAMBERLAIN G E,  
MIELCZAREK S R  
EXCITATION OF OPTICALLY FORBIDDEN STATES IN THE IONIZATION  
CONTINUUM BY ELECTRON IMPACT  
PHYS REV, VOL 139, A1639, (1965)
- 1374 BOYMAN C R, MILLER W D  
EXCITATION OF METHANE, ETHANE, ETHYLENE, PROPYLENE, ACETYLENE,  
PROPENE, AND 1-BUTYNE BY LOW-ENERGY ELECTRON BEAMS  
J CHEM PHYS, VOL 42, 341, (1965)
- 1375 GULDE D E, BANDEL M W  
RESONANCE PHENOMENA IN THE SCATTERING OF ELECTRONS BY  $He$  AND  $He^+$   
PHYS REV LETTERS, VOL 14, 1010, (1965)
- 1376 LABAHN R W  
THE ELASTIC SCATTERING OF LOW ENERGY ELECTRONS FROM ATOMIC HELIUM  
THESIS, UNIVERSITY OF CALIFORNIA, RIVERSIDE, 1965, 128 PAGES
- 1396 BRIGLIA D D, RAPP D  
ELECTRON COLLISION CROSS SECTION PLOTTER  
REV SCI INSTR, VOL 36, 1259, (1965)
- 1400 GILARDINI A L, BROWN S C  
MICROWAVE DETERMINATION OF THE PROBABILITY OF COLLISION OF ELECTRONS  
IN NEON  
PHYS REV, VOL 105, 31, (1957)
- 1411 LACLETTE L N, SHILOFF J C  
COLLISION CROSS-SECTION STUDY OF  $C O_2$   
J CHEM PHYS, VOL 43, 969, (1965)
- 1402 LOZIER H W  
A STUDY OF THE VELOCITIES OF  $H^+$  IONS FORMED IN HYDROGEN BY  
DISSOCIATION FOLLOWING ELECTRON IMPACT  
PHYS REV, VOL 36, 1205, (1939)
- 1406 WINTERS H F  
EXCITATION OF MOLECULAR NITROGEN BY ELECTRON IMPACT  
J CHEM PHYS, VOL 43, 926, (1965)
- 1407 KHARE S P  
DIFFERENTIAL CROSS SECTIONS FOR ELECTRONS ELASTICALLY SCATTERED BY  
HELIUM ATOMS  
PROC PHYS SOC LONDON, VOL 36, 29, (1965)
- 1408 KHARE S P, MOISEWITSCH R L  
THE ANGULAR DISTRIBUTION OF ELECTRONS ELASTICALLY SCATTERED BY  
HELIUM ATOMS AND BY HYDROGEN MOLECULES  
PROC PHYS SOC LONDON, VOL 36, 82, (1965)
- 1409 BELL H L  
ELECTRON IMPACT EXCITATION OF THE 2P STATE OF ATOMIC HYDROGEN  
PROC PHYS SOC LONDON, VOL 36, 246, (1965)

- 1410 RAPP D, BRIGLIA D D, ENGLANDER-GOLDEN P CROSS SECTIONS FOR DISSOCIATIVE IONIZATION OF MOLECULES BY ELECTRON IMPACT  
J CHEM PHYS, VOL 42, 4061, (1965)
- 1411 RAFF L M DETERMINATION OF ELECTRONIC ENERGY LEVELS OF MOLECULES BY LOW ENERGY ELECTRON IMPACT SPECTROSCOPY  
THESIS,  
UNIVERSITY OF ILLINOIS, 1962, 108 PAGES  
UNIVERSITY MICROFILMS, INC., ANN ARBOR, MICHIGAN, NO. 63-3316
- 1414 LANE N F A STUDY OF CERTAIN INELASTIC ELECTRON-ATOM COLLISION PROCESSES  
THESIS,  
UNIVERSITY OF OKLAHOMA, 1964, 231 PAGES  
UNIVERSITY MICROFILMS, INC., ANN ARBOR, MICHIGAN, NO. 64-13,350
- 1415 MCGOWAN W, FINEMAN M ROTATIONAL STRUCTURE AT THRESHOLD IN THE  $(1\pi_2)^+$  ELECTRON-IMPACT IONIZATION SPECTRUM  
PHYS REV LETTERS, VOL 15, 170, (1965)
- 1416 TAIT J H, TAYLOR A J THE 1S-2S EXCITATION OF HYDROGEN ATOMS BY ELECTRON IMPACT, CALCULATED WITH THE USE OF THE SECOND BORN APPROXIMATION INCLUSIVE OF EXCHANGE  
UNITED KINGDOM ATOMIC ENERGY AUTHORITY RESEARCH GROUP REPORT, ATOMIC ENERGY RESEARCH ESTABLISHMENT, HARWELL, BERKSHIRE, ENGLAND, AERE-R-4339, 1963, 11 PAGES
- 1417 CHAMBERLAIN G E, MEIDEMAN M G M INELASTIC SCATTERING OF ELECTRONS BY HELIUM  
PHYS REV LETTERS, VOL 14, 337, (1965)
- 1418 MEYER V D, SKERBELE A, LASSETTRE E N INTENSITY DISTRIBUTION IN THE ELECTRON-IMPACT SPECTRUM OF CARBON MONOXIDE AT HIGH-RESOLUTION AND SMALL SCATTERING ANGLES  
J CHEM PHYS, VOL 43, 804, (1965)
- 1419 SKERBELE A, MEYER V D, LASSETTRE E N RELATIVE INTENSITIES OF TWO RYDBERG TRANSITIONS IN THE ELECTRON-IMPACT SPECTRUM OF WATER  
J CHEM PHYS, VOL 43, 817, (1965)
- 1421 LINEBERGER W C, HOOPER J W, MCDANIEL F W ABSOLUTE CROSS SECTIONS FOR SINGLE IONIZATION OF ALKALI IONS BY ELECTRON IMPACT. I. DESCRIPTION OF APPARATUS AND LI+ RESULTS  
PHYS REV, VOL 141, 151, (1966)
- 1422 MCEACHRAN R P, FRASER P A THE ELASTIC SCATTERING OF LOW ENERGY POSITRONS BY ATOMIC HYDROGEN  
PROC PHYS SOC LONDON, VOL 86, 369, (1965)
- 1424 BUNYAN P J, SCHONFELDER J L POLARIZATION BY MERCURY OF 100 TO 2000 EV ELECTRONS  
PROC PHYS SOC LONDON, VOL 85, 455, (1965)
- 1425 DEICHEL M HERSTELLUNG UND NACHWEIS POLARISierter ELEKTROENSTRAHLEN DURCH ZWEIMALIGE STREUUNG VON GEMEINLEICHEN KLEINER ENERGIE (1-2 KEV) AN Hg-ATOMSTRAHLEN  
Z PHYSIK, VOL 164, 156, (1961)
- 1426 VELDRE V, KARULE E M, IOLIN V IONIZATION OF HYDROGEN ATOM NEAR THE THRESHOLD  
IZV LATV SSSR, VOL 6, 67, (1962)  
UNEDITED ROUGH DRAFT TRANSLATION BY FOREIGN TECHNOLOGY DIVISION, AIR FORCE SYSTEMS COMMAND, WRIGHT-PATTERSON AFB, OHIO, AD 424 845
- 1427 DEICHEL M, REICHERT E UBER DIE ABHANGIGKEIT DES POLARISATIONSGRADDES VON STREUWINKEL BEI HOTT-STREUUNG LANGSAMER ELEKTROEN  
Z PHYSIK, VOL 165, 160, (1965)
- 1428 HALL W I M THE DIFFUSION OF SLOW ELECTRONS IN DEUTERIUM  
AUSTRALIAN J PHYS, VOL 12, 448, (1955)
- 1431 STEIDL M, REICHERT E, DEICHEL M HERSTELLUNG EINES TEILWEISE POLARISIERTEN ELEKTROENSTRAHLES MIT 0.8% POLARISATIONSGRAD  $p = 17$  PER CENT  $\pm 2$  PER CENT BEI  $(10)^{-9}$  A STRAHLENTROMSTÄRKE DURCH ELASTISCHE STREUUNG VON 300 EV-ELEKTROEN AN EINEM Hg-ATOMSTRAHLE  
PHYS LETTERS, VOL 17, 31, (1965)
- 1436 BURKE P G, TAYLOR A J THE IONIZATION OF H AND HE+ BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 207, 105, (1965)
- 1443 HAHN Y, O'NEALLEY T F, SPRUCH L CALCULATION OF THE S-WAVE PHASE SHIFT FOR POSITRON HYDROGEN SCATTERING BY A MINIMUM PRINCIPLE  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 319, 1964, PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-24 JULY, 1963)
- 1448 DELY G, BEATON M J, MOORE D MANY-CHANNEL QUANTUM EFFECT THEORY  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 304, 1964, PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-24 JULY, 1963)

- 1450 TAKEDA S, DOUGAL A A MICROWAVE STUDY OF AFTERGLOW DISCHARGE IN WATER VAPOR  
J APPL PHYS, VOL 31, 412, (1960)
- 1451 RAPP D, BRIGLIA D D, SHARP T E LARGE ISOTOPE EFFECT IN THE FORMATION OF H- OR D- BY ELECTRON IMPACT ON H<sub>2</sub>, H D, AND D<sub>2</sub>  
PHYS REV LETTERS, VOL 14, 533, (1965)
- 1452 TAKAYANAGI K, BELTMAN S EXCITATION OF MOLECULAR ROTATION BY SLOW ELECTRONS  
PHYS REV, VOL 138, 41003, (1965)
- 1453 STUMEN F A MULTIPLE IONIZATION IN NEON, ARGON, KRYPTON, AND XENON  
J CHEM PHYS, VOL 42, 2639, (1965)
- 1455 MILLER F L EXCITATION OF HELIUM ATOMS BY ELECTRON IMPACT  
THESIS, UNIVERSITY OF OKLAHOMA, 1964, 103 PAGES, UNIVERSITY MICROFILMS, INC, ANN ARBOR, MICHIGAN, NO. 66-11,740
- 1456 WITTING M L, GYFTOPOULOS E P AN IONIZATION PROCESS IN A LOW-ENERGY CESIUM PLASMA  
J APPL PHYS, VOL 36, 1328, (1965)
- 1457 VRIENS L A SEMI-EMPIRICAL FORMULA FOR CALCULATION OF ABSOLUTE CROSS SECTIONS FOR IONIZATION AND EXCITATION OF ATOMS BY ELECTRONS  
PHYSICA, VOL 31, 385, (1965)
- 1458 OMIDVAR K IONIZATION OF EXCITED ATOMIC HYDROGEN BY ELECTRON COLLISION  
PHYS REV, VOL 140, A26, (1965)
- 1459 RAPP D, ENGLANDER-GOLDEN P TOTAL CROSS SECTIONS FOR IONIZATION AND ATTACHMENT IN GASES BY ELECTRON IMPACT. I. POSITIVE IONIZATION  
J CHEM PHYS, VOL 43, 1464, (1965)
- 1460 RAPP D, BRIGLIA D D TOTAL CROSS SECTIONS FOR IONIZATION AND ATTACHMENT IN GASES BY ELECTRON IMPACT. II. NEGATIVE-ION FORMATION  
J CHEM PHYS, VOL 43, 1470, (1965)
- 1461 SCOTT B L ANGULAR DISTRIBUTIONS FOR E- / H SCATTERING NEAR THE FIRST INELASTIC THRESHOLD  
PHYS REV, VOL 140, A699, (1965)
- 1463 ROBINSON B B MODIFICATIONS OF THE IMPULSE APPROXIMATION FOR IONIZATION AND DETACHMENT CROSS SECTIONS  
PHYS REV, VOL 140, A764, (1965)
- 1464 MCFARLAND R H GRYZINSKI ELECTRON-IMPACT IONIZATION CROSS-SECTION COMPUTATIONS FOR THE ALKALI METALS  
PHYS REV, VOL 139, A40, (1965)
- 1465 PEEK J H THE TRANSITION  $1s^2 - 2p_{1/2}$  IN  $H_2^+$  INDUCED BY COLLISION WITH AN ELECTRON, PROTON, OR HYDROGEN ATOM  
PHYS REV, VOL 140, A11, (1965)
- 1466 OMIDVAR K EXCITATION BY ELECTRON COLLISION OF EXCITED ATOMIC HYDROGEN  
PHYS REV, VOL 140, A38, (1965)
- 1467 NOLAN J F, PHELPS A V MEASUREMENT OF CESIUM EXCITATION CROSS SECTION NEAR THRESHOLD BY A SHARP TECHNIQUE  
PHYS REV, VOL 140, A772, (1965)
- 1468 VRIENS L EXCITATION AND IONIZATION OF ATOMIC HYDROGEN FROM VARIOUS STATES  
PHYSICA, VOL 31, 1881, (1965)
- 1469 KARULE E M, PETERKOP R K COLLISIONS OF SLOW ELECTRONS WITH ALKALI ATOMS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 134, 1965
- 1470 EMMHART W, MEISTER G THE ANGULAR DEPENDENCE OF THE RESONANCE SCATTERING OF ELECTRONS BY HELIUM  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 129, 1965
- 1471 RUVATT C E, SIMPSON J A, NIELCFAREN S R RESONANCES IN ELECTRON SCATTERING FROM H<sub>2</sub>, H D, AND D<sub>2</sub>  
J CHEM PHYS, VOL 44, 437, (1966)



- 1472 VELDRE V, VINKALNS I ZH  
IONIZATION OF A HYDROGEN ATOM BY SLOW ELECTRONS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 35,  
1965
- 1473 HARRIS L P  
ELECTRICAL CONDUCTIVITY OF CESIUM-SEEDED ATMOSPHERIC PRESSURE  
PLASMAS NEAR THERMAL EQUILIBRIUM  
J APPL PHYS, VOL 34, 2948, (1963)
- 1474 VAINSHTEIN L  
CALCULATION OF THE EFFECTIVE EXCITATION CROSS SECTIONS OF ATOMS  
AND IONS IN ELECTRON COLLISIONS  
TR FIZ INST AKAD NAUK SSSR, VOL 25, 209, (1964)  
SPECIAL RESEARCH REPORT/AUTHORIZED TRANSLATION FROM THE RUSSIAN  
BY THE CONSULTANTS BUREAU, PROCEEDINGS (TRUDY) OF THE P N LEBEDEV  
PHYSICS INSTITUTE, VOL 25, ENTITLED OPTICAL METHODS OF  
INVESTIGATING SOLID BODIES, PAGE 179, 1965
- 1475 ROSE U C  
ENERGY LOSSES AND SCATTERING OF ELECTRONS IN MERCURY VAPOR  
CAN J RESEARCH, VOL 3, 174, (1930)
- 1476 PRESNYAKOV L  
THE IONIZATION OF ATOMS BY ELECTRON IMPACT  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 20, 700, (1965)
- 1477 TAKAYANAGI K, BELTHAN S  
ROTATIONAL EXCITATION OF OXYGEN MOLECULES BY LOW-ENERGY ELECTRONS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK,  
PAGE 380, 1965
- 1478 BEIGEN J, WITTHACK K  
EXCITATION OF MOLECULAR VIBRATIONS BY FAST ELECTRONS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK,  
PAGE 354, 1965
- 1479 COLEMAN J P, McDOWELL M R C  
THE QUANTAL IMPULSE APPROXIMATION FOR ELECTRON-IMPACT EXCITATION OF  
HYDROGEN  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK,  
PAGE 23, 1965
- 1480 LASSETTRE E N, MEYER U D,  
LONGMIRE M S  
RELATIVE INTENSITIES OF LYMAN-BIRGE-HOPFIELD BANDS IN ELECTRON  
IMPACT SPECTRUM OF NITROGEN  
J CHEM PHYS, VOL 42, 807, (1965)
- 1481 SKENBELE A, LASSETTRE E N  
ELECTRON-IMPACT SPECTRA  
J CHEM PHYS, VOL 42, 305, (1965)
- 1482 GIBBONS J J, SQUIRES H E  
CROSS SECTION FOR DISSOCIATIVE RECOMBINATION OF NITRIC OXIDE  
PROC NATL ACAD SCI INDIA SECT A, VOL 33, 579, (1963)
- 1483 TIETZ T  
AN ANALYTICAL FORMULA FOR THE SCATTERING AMPLITUDES OF THE ELECTRON  
DETACHMENT FOR THE NEGATIVE HYDROGEN ION BY ELECTRON IMPACT  
PROC NATL ACAD SCI INDIA SECT A, VOL 33, 587, (1963)
- 1484 KUREPA M V  
COMPARISON OF EXPERIMENTAL AND THEORETICAL RESULTS FOR IONIZATION  
CROSS SECTIONS OF INERT GASES  
BULL BORIS KODRICH INST NUCL SCI, VOL 14, 187, (1963)
- 1485 KESTNER N R, JORTNER J,  
COHEN M M, RICE S A  
LOW-ENERGY ELASTIC SCATTERING OF ELECTRONS AND POSITRONS FROM  
HELIUM ATOMS  
PHYS REV, VOL 148, A56, (1965)
- 1486 SMITH S J  
MEASUREMENT OF ELECTRON-IMPACT EXCITATION OF LYMAN ALPHA PHOTONS  
FROM THE 2P TO 1S TRANSITION  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 377,  
1965
- 1487 GAILITIS M  
CALCULATION OF LOWER BOUNDS FOR THE ELECTRON-HYDROGEN SCATTERING  
PHASE SHIFTS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 16,  
1965
- 1488 TAKAYANAGI K  
VIBRATIONAL EXCITATION OF HYDROGEN MOLECULE BY SLOW ELECTRONS  
J PHYS SOC JAPAN, VOL 24, 562, (1965)

- 1489 CROMPTON R W, JORY R L  
THE MOMENTUM-TRANSFER CROSS SECTION FOR LOW-ENERGY ELECTRONS IN HELIUM  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 118, 1965
- 1490 SUNSHINE G, BEDERSON B, AUDNEY B H  
LOW-ENERGY ELECTRON SCATTERING BY ATOMIC OXYGEN  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 130, 1965
- 1491 KARULE E H  
ELASTIC SCATTERING OF LOW-ENERGY ELECTRONS BY ALKALI ATOMS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 139, 1965
- 1492 BAKER F A, HASTED J B  
IONISATION D'IONS POSITIFS PAR IMPACT D'ELECTRONS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 477, 1965
- 1493 KHARE S P, MOISEWITSCH B L  
THE EFFECT OF POLARIZATION ON THE ANGULAR DISTRIBUTION OF ELECTRONS SCATTERED BY ATOMS  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 49, 1964, PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY 1963)
- 1494 ALLISON D C S, MOISEWITSCH B L, MCINTYRE N A J  
THE ELASTIC SCATTERING OF POSITRONS BY ATOMIC HYDROGEN AND HELIUM  
PROC PHYS SOC LONDON, VOL 76, 1169, (1961)
- 1495 BRANSDEN B H  
THE LOW ENERGY SCATTERING OF POSITRONS BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON, VOL 79, 190, (1962)
- 1496 MAHN Y, O'NEILL T F, SPRUCH L  
STATIC APPROXIMATION AND BOUNDS ON SINGLE CHANNEL PHASE SHIFTS  
PHYS REV, VOL 128, 932, (1962)
- 1498 GARRETT W R  
POLARIZATION AND EXCHANGE EFFECTS IN SLOW-ELECTRON SCATTERING FROM LITHIUM AND SODIUM  
PHYS REV, VOL 140, A705, (1965)
- 1499 MAHN Y, SPRUCH L  
MINIMUM-PRINCIPLE CALCULATION OF THE POSITRON-HYDROGEN S-WAVE PHASE SHIFT  
PHYS REV, VOL 140, A18, (1965)
- 1500 KLEINMAN C J, MAHN Y, SPRUCH L  
HIGHER PARTIAL WAVES IN POSITRON-HYDROGEN SCATTERING  
PHYS REV, VOL 140, A413, (1965)
- 1501 DUNN G H, VAN ZYL B, ZARE R N  
DISSOCIATION OF (H2)+ BY ELECTRON IMPACT  
PHYS REV LETTERS, VOL 15, 610, (1965)
- 1502 MCFARLAND R H  
ON ATOMIC IONIZATION BY ELECTRON IMPACT  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 416, 1965
- 1503 DUNN G H, VAN ZYL B, ZARE R N  
MEASUREMENT OF THE CROSS SECTION FOR DISSOCIATION OF (H2)+ BY ELECTRON IMPACT  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC, HASTINGS-ON-HUDSON, NEW YORK, PAGE 443, 1965
- 1504 MCCONKEY J V, LATIMER I D  
ABSOLUTE CROSS SECTIONS FOR SIMULTANEOUS IONIZATION AND EXCITATION OF N2 BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 86, 463, (1965)
- 1505 DABURS R, PETERKOP R K  
CONCERNING THE SINGLE-ELECTRON APPROXIMATION IN COLLISION THEORY  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 20, 1276, (1965)
- 1506 KINGSTON A E  
THE IONIZATION OF INERT GAS ATOMS BY ELECTRON AND PROTON IMPACT AT HIGH ENERGIES  
PROC PHYS SOC LONDON, VOL 86, 467, (1965)
- 1507 DUBOVOL L V, SHVETS O M  
PROCEDURE FOR MEASURING TOTAL PARTICLE COLLISION CROSS SECTIONS IN DENSE PLASMA  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 24, 1020, (1965)

- 1508 MCGOWAN W. FINEMAN M  
DETAILS OF ELECTRON-IMPACT IONIZATION OF H AND H<sub>2</sub> NEAR THRESHOLD  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 429,  
1965
- 1509 FINEMAN M. CLARKE E M.  
MCGOWAN W. HANSON H P  
AUTOIONIZATION OF H<sub>2</sub> UNDER ELECTRON IMPACT  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 425,  
1965
- 1510 TIETZ T  
PAIS APPROXIMATE FORMULA FOR THE PHASE SHIFT AND ELECTRON SCATTERING  
IN THE THOMAS-FERMI THEORY  
PROC NATL ACAD SCI INDIA SECT A, VOL 33, 500, (1963)
- 1511 TIETZ T  
PAIS APPROXIMATE FORMULA FOR THE PHASE SHIFT AND ELECTRON SCATTERING  
IN THE THOMAS-FERMI THEORY  
ACTA PHYS ACAD SCI HUNG, VOL 10, 1, (1963)
- 1512 MCGOWAN W. CLARKE E M.  
CURLEY E K  
ELECTRON-H-ATOM ELASTIC-SCATTERING RESONANCES  
PHYS REV LETTERS, VOL 14, 917, (1965)
- 1513 NEEDLE D W O. KEESING R S W  
THE THRESHOLD BEHAVIOR OF ELECTRON EXCITATION AND POLARIZATION  
FUNCTIONS IN HELIUM  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 382,  
1965
- 1515 KARULE E M. PETERKOP R K  
SCATTERING OF ELECTRONS ON LITHIUM ATOMS  
LATVIJAS PSR ZINATNU AKAD VESTIS, VOL 1, 53, (1964)
- 1516 GURCHUNELIYA A D  
SCATTERING OF SLOW ELECTRONS BY ATOMS  
LIETUVOS FIZ RINKINYS, VOL 3, 199, (1963)
- 1517 ZAPESCHNYI I P. SHIMON L L  
ABSOLUTE EXCITATION CROSS SECTIONS OF THE ALKALI METALS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 401,  
1965
- 1518 HANSON E E  
A STUDY OF KINETIC ENERGIES OF ATOMIC IONS FORMED BY ELECTRON IMPACT  
IN NITRIC OXIDE AND HYDROGEN CHLORINE  
PHYS REV, VOL 51, 86, (1937)
- 1519 SINGH B. GUHA S K  
SCATTERING OF POSITRONS BY SIX-FOLD IONIZED URANIUM ATOM  
INDIAN J PHYS, VOL 36, 189, (1962)
- 1520 SALMUNA A  
CALCUL DES SECTIONS DE CHOC DE LA DIFFUSION D'ELECTRONS DE FAIBLES  
ENERGIES PAR DES ATOMES DE SODIUM NEUTRES  
CANIERS PHYS, VOL 17, 465, (1963)
- 1521 ZAPESCHNYI I P. SHPENIK O B  
RESONANCES IN THE EXCITATION FUNCTIONS OF ATOMS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 391,  
1965
- 1522 POMILLA F R  
THE 25-35 EXCITATION OF HYDROGEN ATOMS BY ELECTRON IMPACT  
THESIS, FORDHAM UNIVERSITY, NEW YORK, 1963, 113 PAGES, UNIVERSITY  
MICROFILMS, INC. ANN ARBOR, MICHIGAN, NO. 64-2417
- 1523 GARRETT H R  
POLARIZATION EFFECTS IN ATOMIC SCATTERING OF SLOW ELECTRONS  
THESIS, UNIVERSITY OF ALABAMA, 1964, 76 PAGES, UNIVERSITY  
MICROFILMS, INC. ANN ARBOR, MICHIGAN, NO. 64-12788
- 1524 TAYLOR A J  
VARIATIONAL CALCULATION OF ELECTRON-HYDROGEN SCATTERING FOR ALL  
PARTIAL WAVES WITH THE USE OF KOHN'S METHOD  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 27,  
1965
- 1525 FITE H L. BRACKMANN R T.  
HENNEMSON W R  
DISSOCIATIVE ATTACHMENT OF ELECTRONS TO H<sub>2</sub>O<sup>+</sup>  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 180,  
1965
- 1526 OMIDVAR K  
IONIZATION OF EXCITED ATOMIC HYDROGEN BY ELECTRON COLLISION IN  
CHLAMO-BORN AND COULOMB-BORN-EXCHANGE APPROXIMATIONS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCHAPTEERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 43,  
1965

- 1927 CHAMBERLAIN G E, SIMPSON J H,  
KUVATT C E, WEIDEMAN M G M  
ELECTRON-IMPACT SPECTRA OF HELIUM AND ARGON  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 378,  
1965
- 1928 MOLT H K, KROTKOV R  
EXCITATION OF HELIUM TO 3 TRIPLET P AND 2 SINGLET S STATES BY  
ELECTRON BOMBARDMENT  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 384,  
1965
- 1929 EHMHARDT H, MEISTER G  
DIE WINKELABHÄNGIGKEIT DER RESONANZSTREUUNG NIEDERENERGETISCHER  
ELEKTROEN AN HELIUM  
PHYS LETTERS, VOL 14, 240, (1965)
- 1930 FIQUET-FAYARD F, MULLER F,  
ZIESEL J P  
VALIDITE DE LA LOI DE RUTHE DANS LE CAS D'IONISATIONS DOUBLES PAR  
IMPACT ELECTRONIQUE  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 413,  
1965
- 1931 FRISH S E, REVALD V F  
EFFECTIVE CROSS SECTIONS FOR THE DIRECT AND STEPWISE EXCITATION  
OF NEON ATOMS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 15, 395, (1963)
- 1932 CROTHERS D, MCCARNOLL R  
EXCITATION OF NEUTRAL ATOMS BY ELECTRON IMPACT  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 404,  
1965
- 1933 VOLKOVA L M, DEVIATOV A M  
DETERMINATION OF THE EXCITATION CROSS SECTIONS FOR THE RESONANCE  
LINES OF POTASSIUM  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 27, 1025, (1963)
- 1934 BOGDANOVA I, BEITSI I I  
CONCERNING THE POSSIBILITY OF MEASURING OPTICAL EXCITATION FUNCTIONS  
BY MEANS OF MODULATED ELECTRON BEAMS  
BULL ACAD SCI USSR PHYS SER ENGL TRANSL, VOL 27, 1029, (1963)
- 1935 KESSLER J, LINDNER M  
MESSUNG DER INTERFERENZEN BEI DER STREUUNG LANGSAMER ELEKTROEN  
AN QUECKSILBERATOMEN  
PHYS LETTERS, VOL 11, 156, (1964)
- 1936 TAYLOR A J, LEWIS B A  
EXCITATION CROSS SECTIONS TO THE  $n = 4$  LEVELS OF  $(N)4+$  BY ELECTRON  
IMPACT, COMPUTED WITH THE COULOMB-BORN APPROXIMATION  
UNITED KINGDOM ATOMIC ENERGY AUTHORITY RESEARCH GROUP REPORT, ATOMIC  
ENERGY RESEARCH ESTABLISHMENT, HARWELL, BERKSHIRE, ENGLAND, AERE -  
R 5861, 1965, 11 PAGES
- 1938 MAJID D, KLEINPOPPEN H,  
KRUGEN H  
EXCITATION AND POLARIZATION OF THE HE II FOWLER ALPHA LINE, LAMDA  
 $\approx 4686$  ANGSTROMS, IN ELECTRON-HELIUM ATOM COLLISIONS  
(IN ABSTRACTS OF) THE FOURTH INTERNATIONAL CONFERENCE ON THE PHYSICS  
OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA, 2-6 AUG 1965)  
SCIENCE BOOKCRAFTERS, INC. HASTINGS-ON-HUDSON, NEW YORK, PAGE 398,  
1965
- 1939 MYERSCOUGH V P  
NON-ITERATIVE APPROACH TO THE ELASTIC SCATTERING OF ELECTRONS BY  
COMPLEX ATOMS  
PHYS LETTERS, VOL 18, 242, (1965)
- 1941 OCHIMU V I  
IONIZATION OF THE HYDROGEN ATOM BY ELECTRON IMPACT WITH ALLOWANCE  
FOR THE EXCHANGE  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 20, 1175, (1965)
- 1942 KARULE E M  
ELASTIC SCATTERING OF LOW-ENERGY ELECTRONS BY ALKALI ATOMS  
PHYS LETTERS, VOL 15, 137, (1964)
- 1943 BRIGLIA D D  
MASS SPECTROMETER STUDIES OF IONIZATION PROCESSES IN NITROGEN  
THESIS, UNIVERSITY OF CALIFORNIA, LOS ANGELES, CALIFORNIA, 1964
- 1944 RUDGE H R M, SEATON M J  
IONIZATION OF ATOMIC HYDROGEN BY ELECTRON IMPACT  
PROC ROY SOC LONDON SER A, VOL 203, 762, (1950)
- 1946 VAINSHTEIN L  
THE EXCITATION OF ATOMS AND IONS BY ELECTRON IMPACT  
1. CALCULATION IGNORING EXCHANGE  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 11, 103, (1961)
- 1947 VELDM V, KARULE E M  
IONIZATION OF A HYDROGEN ATOM BY SLOW ELECTRONS  
74 INST FIZ AKAD NAUK LATV SSR, VOL 13, 127, (1963)
- 1948 VELDM V, VINKALNS I ZH  
CALCULATION OF THE IONIZATION CROSS SECTION FOR A HYDROGEN ATOM IN  
THE PLANE WAVES APPROXIMATION  
74 INST FIZ AKAD NAUK LATV SSR, VOL 13, 121, (1963)

- 1550 DAMBURG R, PETERKOP R K  
RESONANCE EFFECTS IN ELECTRON SCATTERING ON HYDROGEN ATOMS  
TR INST FIZ AKAD NAUK LATV SSR, VOL 13, 47, (1963)
- 1551 DAMBURG R  
THE ASYMPTOTIC BEHAVIOR OF FUNCTIONS DESCRIBING PARTIAL WAVES  
TR INST FIZ AKAD NAUK LATV SSR, VOL 13, 37, (1963)
- 1552 DAMBURG R, PETERKOP R K  
COLLISIONS OF SLOW ELECTRONS WITH HYDROGEN ATOMS  
TR INST FIZ AKAD NAUK LATV SSR, VOL 13, 17, (1963)
- 1553 DAMBURG R  
THE EVIDENCE OF STRONG COUPLING AT COLLISIONS BETWEEN ELECTRONS AND  
THE HYDROGEN ATOM  
TR INST FIZ AKAD NAUK LATV SSR, VOL 13, 11, (1963)
- 1554 LYASH A V  
IONIZATION OF A HELIUM ATOM WITH EXCITATION  
TR INST FIZ AKAD NAUK LATV SSR, VOL 13, 139, (1963)
- 1555 VELORE V, LYASH A V  
IONIZATION OF A HELIUM ATOM NEAR THRESHOLD  
TR INST FIZ AKAD NAUK LATV SSR, VOL 13, 135, (1963)
- 1557 BAUER E, BARTKY C D  
CALCULATION OF INELASTIC ELECTRON-ATOM AND ELECTRON-MOLECULE  
COLLISION CROSS SECTIONS BY CLASSICAL METHODS  
PHILCO REPORT NO. U-2943, AERCAUTRONIC, FORD ROAD, NEWPORT BEACH,  
CALIFORNIA, 1965, 115 PAGES.
- 1558 BAUER E, BARTKY C D  
CALCULATION OF INELASTIC ELECTRON-MOLECULE COLLISION CROSS SECTIONS  
BY CLASSICAL METHODS  
J CHEM PHYS, VOL 43, 2466, (1965)
- 1560 EISSNER W  
CALCULATIONS FOR EXCITATION OF THE M SHELL OF H NEAR THE THRESHOLD  
(IN) ATOMIC COLLISION PROCESSES, M R C MCDOWELL, EDITOR,  
NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 183, 1964.  
PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF  
ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-26 JULY, 1963)
- 1564 BREIS E L, LIN CHUN C  
VIBRATIONAL EXCITATION OF DIATOMIC MOLECULES BY ELECTRON IMPACT  
J CHEM PHYS, VOL 43, 3870, (1965)
- 1565 CHRISTOPHOU L S, HUMST S S,  
COMPTON R N, REINHARDT P W  
DETERMINATION OF ELECTRON-CAPTURE CROSS SECTIONS WITH SWARM-BEAM  
TECHNIQUES  
J CHEM PHYS, VOL 43, 4273, (1965)
- 1566 CORRIHAN S J B  
DISSOCIATION OF MOLECULAR HYDROGEN BY ELECTRON IMPACT  
J CHEM PHYS, VOL 43, 4341, (1965)
- 1567 LASSETTNE E H  
POWER SERIES REPRESENTATION OF GENERALIZED OSCILLATOR STRENGTHS  
J CHEM PHYS, VOL 43, 4479, (1965)
- 1568 MOOPER J W, LINDBERGER V C,  
BACON R H  
ABSOLUTE CROSS SECTIONS FOR SINGLE IONIZATION OF ALKALI IONS BY  
ELECTRON IMPACT, II. Na+ AND K+ RESULTS AND COMPARISONS WITH THEORY  
PHYS REV, VOL 141, 165, (1964)
- 1569 NYENSCOUW V P  
ELASTIC SCATTERING OF SLOW ELECTRONS BY ATOMIC OXYGEN  
PHYS LETTERS, VOL 19, 120, (1965)
- 1570 SMIT C, FIJNAUT H H  
EXCITATION FUNCTION OF THE MERCURY LINE AT 5461 ANGSTROMS, MEASURED  
WITH AN IMPROVED ELECTRON ENERGY DISTRIBUTION  
PHYS LETTERS, VOL 19, 121, (1965)
- 1571 STONE P H  
POLARIZATION POTENTIALS FROM LOW ENERGY SCATTERING - E+ / H AND  
E+ / LI  
PHYS REV, VOL 141, 137, (1964)
- 1572 CERMAK V  
I. INDIVIDUAL EFFICIENCY CURVES FOR THE EXCITATION OF 2 TRIPLET S  
AND 2 SINGLET S STATES OF HELIUM BY ELECTRON IMPACT. II. RETARDING  
POTENTIAL MEASUREMENT OF THE KINETIC ENERGY OF ELECTRONS RELEASED  
IN PENNING IONIZATION  
JILA REPORT NO. 63, UNIVERSITY OF COLORADO, BOULDER, COLORADO, 1964,  
22 PAGES
- 1573 SAMPSON D H, MCDONNELL R C  
THEORY OF ROTATIONAL EXCITATION OF HOMOGENEOUS DIATOMIC MOLECULES  
BY SLOW ELECTRONS - APPLICATION TO H2 AND H2  
PHYS REV, VOL 140, A1466, (1965)
- 1575 PYODONOV V L  
POLARIZATION OF THE 677 ANGSTROM MERCURY LINE ARISING FROM ELECTRON  
IMPACT  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 19, 79, (1966)
- 1576 VELORE V, LYASH A V,  
RABIN L L  
EXCITATION OF NEON ATOMS BY ELECTRON IMPACT  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 19, 100, (1966)
- 1577 DAIDER J W, WALDRON H F  
SCATTERING CROSS SECTIONS OF AR, NE, CO, AND O TO THERMAL ELECTRONS  
PAPER GIVEN AT GASEOUS ELECTRONICS CONFERENCE, UNIVERSITY OF  
MINNESOTA, MINNEAPOLIS, MINNESOTA, 1965, 17 PAGES

- 1978 DE NARIA S. SOLOPINGER P.  
MALASHINA L. PIACENTE V  
MEASUREMENTS OF RELATIVE VALUES OF ELECTRON IMPACT IONIZATION CROSS  
SECTIONS OF  $Ar$ ,  $Zn$ ,  $Co$ ,  $Sr$ ,  $Se$ ,  $Te$  AND  $Tl$   
TECHNICAL REPORT NO. APPL-TR-84-231, RESEARCH AND TECHNOLOGY  
DIVISION, WRIGHT-PATTERSON AIR FORCE BASE, OHIO, 1984, 19 PAGES
- 1979 BRACKETT J M  
APPLICATION OF QUANTUM SCATTERING THEORY TO LOW ENERGY ELECTRON  
DIFFRACTION AND MOLECULAR COLLISIONS  
THESIS, PURDUE UNIVERSITY, LAFAYETTE, INDIANA, 1983, 228 PAGES,  
UNIVERSITY MICROFILMS, INC, ANN ARBOR, MICHIGAN, NO. 84-4567
- 1981 ARNSTEAD T C  
THE VARIATIONAL METHOD IN ELECTRON-HYDROGEN SCATTERING  
THESIS, UNIVERSITY OF CALIFORNIA, BERKELEY, CALIFORNIA, 1983, 81  
PAGES, UNIVERSITY MICROFILMS, INC, NO. 85-8120
- 1982 VELDRE V. VINHALMS I ZH  
CALCULATION OF EFFECTIVE CROSS SECTIONS FOR THE IONIZATION OF  
HYDROGEN ATOMS BY ELECTRON IMPACT  
OPT SPECTRY USSR ENGLISH TRANSL. VOL 18, 907, (1985)
- 1983 ZAPISOCHNYI I P. FELTSAN P V  
EFFECTIVE EXCITATION CROSS SECTIONS OF THE PRINCIPAL HELIUM LINES  
OPT SPECTRY USSR ENGLISH TRANSL. VOL 18, 514, (1985)
- 1984 REVALD V F  
THE EXCITATION OF NEON IN THE POSITIVE COLUMN OF A LOW-PRESSURE  
DISCHARGE  
OPT SPECTRY USSR ENGLISH TRANSL. VOL 18, 318, (1985)
- 1985 GOERSCH M. REISER J.  
TOPSCHOWSKY M  
ROTATIONAL STRUCTURE IN THE ENERGY LOSS SPECTRUM OF  $H_2$   
PHYS LETTERS. VOL 17, 246, (1985)
- 1986 HAFNER M. KLEINPOPPEN M.  
KRUBER M  
POLARIZATION OF ALKALI LINE RADIATION EXCITED BY ELECTRON IMPACT  
PHYS LETTERS. VOL 18, 270, (1985)
- 1987 SALMONA A  
CALCUL DES SECTIONS DE CHOCS DE LA COLLISION ELECTRON-SODIUM  
COMPT REND. VOL 268, 2474, (1985)
- 1988 EHRHARDT M. LINDER F.  
REISTER G  
UNELASTISCHE STREUUNG NIEDERENERGETISCHER ELEKTROEN AN METHAN,  
PROPAN UND N-HEPTAN  
Z NATURFORSCH. VOL 28A, 989, (1985)
- 1989 TARAYANAGI K  
BEHAVIOR OF SLOW ELECTRONS IN ATMOSPHERIC GASES. PART 1. GENERAL  
CONSIDERATION OF ROTATIONAL EXCITATION AND APPLICATION TO THE  
OXYGEN MOLECULE.  
RENT IONOSPHERE SPACE RES JAPAN. VOL 19, 1, (1985)
- 1990 WILLIAMSON M A  
ELECTRON COLLISION CROSS SECTION FOR HELIUM  
THESIS, UNIVERSITY OF TEXAS, AUSTIN TEXAS, 1982, 63 PAGES,  
UNIVERSITY MICROFILMS, INC, ANN ARBOR, MICHIGAN, NO. 82-4876
- 1991 KOZLOV G I  
DETERMINATION OF COLLISION CROSS SECTIONS OF ELECTRONS WITH ATOMS  
AND MOLECULES OF CERTAIN GASES BY A DOUBLE-BEAM RADIO PROBE METHOD  
SOVIET PHYS TECH PHYS ENGLISH TRANSL. VOL 19, 690, (1985)
- 1992 SCHALZ S J. ASUNDI R K  
FORMATION OF  $H_2$  BY ELECTRON IMPACT ON  $H_2$  AT LOW ENERGY  
PHYS REV LETTERS. VOL 15, 944, (1985)
- 1993 KLEINPOPPEN M. RAIBLE V  
ON THE NARROW RESONANCE IN THE SCATTERING OF ELECTRONS BY ATOMIC  
HYDROGEN  
PHYS LETTERS. VOL 18, 24, (1985)
- 1994 VRIENS L  
APPROXIMATE CROSS SECTIONS FOR OPTICALLY DISALLOWED EXCITATION OF  
ATOMS BY ELECTRONS  
PHYSICA. VOL 31, 1333, (1985)
- 1995 KINGSTON A E  
THE CROSS SECTIONS FOR IONIZATION OF THE EXCITED STATES OF  
ATOMIC HYDROGEN BY HIGH ENERGY ELECTRONS  
PROC PHYS SOC LONDON. VOL 86, 1279, (1985)
- 1996 DEICHSEL M. REICHERT L.  
STEIDL M  
ELEKTROENPOLARISATION IM ENERGIEBEREICH UNTERHALB 50 EV DURCH  
STREUUNG AN FREIEN  $H_2$ -ATOMEN  
Z PHYSIK. VOL 189, 212, (1986)
- 1997 REIGER J. STICKEL M  
ENERGY LOSSES OF FAST ELECTRONS IN NITROGEN  
J CHEM PHYS. VOL 63, 6438, (1985)
- 1998 JOACHAIN C J. MITTLEMAN M M  
REARRANGEMENT COLLISIONS - ELECTRON EXCITATION OF  
 $He(2\text{ triplet } S)$   
(IN ABSTRACTS OF THE FOURTH INTERNATIONAL CONFERENCE ON THE  
PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (QUEBEC, CANADA,  
2-6 AUG 1985) SCIENCE BOOKCHAPERS, INC, MARTINUS-BOHANNON,  
NEW YORK, PAGE 289, 1984
- 1998 JOACHAIN C J. MITTLEMAN M M  
REARRANGEMENT COLLISIONS - ELECTRON EXCITATION OF  
 $He(2\text{ triplet } S)$   
PHYS REV. VOL 148, 6439, (1985)

- 1646 SCHONFELDER J L  
ATOMIC STRUCTURES AND ELECTRON SCATTERING IN THE RELATIVISTIC  
HARTREE APPROXIMATION  
PROC PHYS SOC LONDON, VOL 87, 163, (1966)
- 1648 ZAPESUCHNYI I P, KISHKO S M,  
SHEVERA V S, FELTSAN P V,  
SHIMON L L  
A SPECTROSCOPIC STUDY OF THE EXCITATION FUNCTIONS OF ATOMS AND  
MOLECULES  
UKR FIZ ZH, VOL 6, 770, (1961)
- 1650 LENANDER C J  
LOW-ENERGY ELECTRON SCATTERING FROM ATOMS AND MOLECULES - A  
MODEL  
PHYS REV, VOL 142, 1, (1966)
- 1653 BURKE P G, TAIT J M,  
LEWIS B A  
EXCITATION OF NITROGEN ( $4s$ ) BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 87, 209, (1966)
- 1654 PEACH G  
IONIZATION OF SODIUM AND MAGNESIUM BY ELECTRON AND PROTON IMPACT  
PROC PHYS SOC LONDON, VOL 87, 375, (1966)
- 1655 PEACH G  
ELECTRON EXCHANGE IN THE COLLISIONAL IONIZATION OF ATOMS WITH  
OUTER  $s$  ELECTRONS  
PROC PHYS SOC LONDON, VOL 87, 381, (1966)
- 1656 PRASAD S S  
IONIZATION OF  $H(2S)$  AND  $H(2P)$  BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 87, 393, (1966)
- 1657 KINGSTON A E, LAUER J E  
HIGH-ENERGY CROSS SECTIONS FOR ELECTRON EXCITATIONS OF EXCITED  
HYDROGEN ATOMS IN WHICH THE PRINCIPAL QUANTUM NUMBER IS CHANGED  
BY ONE  
PROC PHYS SOC LONDON, VOL 87, 399, (1966)
- 1658 HARRIOTT R  
LOW-ENERGY ELECTRON SCATTERING BY METASTABLE HELIUM  
PROC PHYS SOC LONDON, VOL 87, 407, (1966)
- 1659 MUSAIN D, CHOUDHURY A L,  
RAFIQUILLAH A K, MALIK F B  
A VARIATIONAL CALCULATION OF ELASTIC SCATTERING OF ELECTRONS BY  
A HELIUM ATOM  
PROC PHYS SOC LONDON, VOL 87, 417, (1966)
- 1663 SILVERMAN S M, LASSETTRE E M  
TEST OF THE LOW-ENERGY LIMIT OF THE BORN APPROXIMATION  
J CHEM PHYS, VOL 44, 2219, (1966)
- 1665 WILKINS R L  
MONTE CARLO CALCULATIONS OF CROSS SECTIONS OF  
ELECTRON-POSITIVE-MOLECULAR-ION DISSOCIATIVE RECOMBINATION  
J CHEM PHYS, VOL 44, 1894, (1966)
- 1666 GELTMAN S, TAKAYANAGI K  
EXCITATION OF MOLECULAR ROTATION BY SLOW ELECTRONS. II.  
PHYS REV, VOL 143, 25, (1966)
- 1673 MITTFMAN M M  
SINGLE AND DOUBLE IONIZATION OF HE BY ELECTRONS  
PHYS REV LETTERS, VOL 14, 499, (1965)
- 1674 VELOHE V, RABIK L L  
THE CALCULATION OF BORN EXCITATION CROSS SECTIONS OF EXCITED  
HYDROGEN ATOMS  
OPT SPECTRY USSR ENGLISH transl, VOL 19, 265, (1965)
- 1676 SAMPSON D M, NJOLSNES R C  
ROTATIONAL EXCITATION OF  $O_2$  BY SLOW ELECTRONS  
PHYS REV, VOL 144, 116, (1966)
- 1677 MOLT N K, KROTKOV R  
EXCITATION OF  $n = 2$  STATES IN HELIUM BY ELECTRON BOMBARDMENT  
PHYS REV, VOL 144, 82, (1966)
- 1679 MEYER V D, LASSETTRE E M  
WEAK TRANSITIONS IN EXCITATION OF  $N_2$  BY ELECTRON IMPACT AND  
COMPARISON WITH EXCITATION BY ABSORPTION OF RADIATION  
J CHEM PHYS, VOL 44, 2535, (1966)
- 1681 ZAPESUCHNYI I P, SHIMON L L,  
SOSHIKOV A K  
EFFECTIVE EXCITATION CROSS SECTIONS OF ALKALI METAL ATOMS  
COLLIDING WITH SLOW ELECTRONS. II-POTASSIUM  
OPT SPECTRY USSR ENGLISH transl, VOL 19, 480, (1965)
- 1681 BOIKOVA R F, FRAKIN E E  
CALCULATION OF CROSS SECTIONS FOR THE EXCITATION OF THE ENERGY  
LEVELS OF INERT GASES BY ELECTRONS  
OPT SPECTRY USSR ENGLISH transl, VOL 19, 470, (1965)
- 1682 OCHKUN V I, BHATSEV V F  
EXCHANGE EXCITATION OF HELIUM BY ELECTRON IMPACT  
OPT SPECTRY USSR ENGLISH transl, VOL 19, 274, (1965)
- 1683 ZAPESUCHNYI I P, SHIMON L L  
THE EFFECTIVE EXCITATION CROSS SECTIONS OF ALKALI-METAL ATOMS  
COLLIDING WITH SLOW ELECTRONS. I, SODIUM  
OPT SPECTRY USSR ENGLISH transl, VOL 19, 260, (1965)
- 1686 LEVIN F S  
THEORY OF LOW-ENERGY SCATTERING OF ELECTRONS BY HYDROGEN  
ATOMS  
PHYS REV, VOL 142, 33, (1966)

- 1687 POTTIE R P CROSS SECTIONS FOR IONIZATION BY ELECTRONS. I. ABSOLUTE IONIZATION CROSS SECTIONS OF  $Zn$ ,  $CO$ , AND  $Te_2$ . I. COMPARISON OF THEORETICAL WITH EXPERIMENTAL VALUES FOR ATOMS AND MOLECULES  
J CHEM PHYS, VOL 44, 914, (1966)
- 1688 SURAL D P, SIL N C EXCITATION OF HELIUM-LIKE IONS BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 87, 281, (1966)
- 1690 SCHRAH B L, VAN DER NIEL H J, DE MEER F J, HOUSTAFI H R ABSOLUTE GROSS IONIZATION CROSS SECTIONS FOR ELECTRONS (10.6-12 KEV) IN HYDROCARBONS  
J CHEM PHYS, VOL 44, 49, (1966)
- 1691 DORMAN F M FIRST DIFFERENTIAL IONIZATION EFFICIENCY CURVES FOR FRAGMENT IONS BY ELECTRON IMPACT  
J CHEM PHYS, VOL 44, 35, (1966)
- 1692 MEIDEMAN H G M, KUYATT C E, CHAMBERLAIN G E INELASTIC ELECTRON SCATTERING FROM  $H_2$   
J CHEM PHYS, VOL 44, 448, (1966)
- 1693 MEIDEMAN H G M, KUYATT C E, CHAMBERLAIN G E RESONANCES IN THE ELASTIC AND INELASTIC ELECTRON SCATTERING FROM  $H_2$   
J CHEM PHYS, VOL 44, 354, (1966)
- 1694 KINGSTON A E A COMPARISON OF THE CROSS SECTIONS FOR IONIZATION OF THE EXCITED STATES OF HYDROGEN BY ELECTRONS CALCULATED USING GRYZINSKI'S CLASSICAL THEORY AND BORH'S QUANTAL THEORY  
PROC PHYS SOC LONDON, VOL 87, 193, (1966)
- 1695 FOX H A ELECTRON EXCITATION FROM THE GROUND STATE OF HELIUM TO THE 3 SIMPLET D STATE  
PROC PHYS SOC LONDON, VOL 88, 65, (1966)
- 1696 BELY O AN EVALUATION OF THE EXCHANGE CONTRIBUTION IN THE SCATTERING OF ELECTRONS BY POSITIVE IONS  
PROC PHYS SOC LONDON, VOL 87, 1919, (1966)
- 1697 COLEMAN J P, McDOWELL M R C EXCITATION OF HYDROGEN IN THE IMPULSE APPROXIMATION  
PROC PHYS SOC LONDON, VOL 87, 879, (1966)
- 1700 NISHIMURA M MEASUREMENT OF THE EXCITATION FUNCTION OF  $(C O_2)^+$  BANDS BY ELECTRON IMPACT  
J PHYS SOC JAPAN, VOL 21, 564, (1966)
- 1703 BANERJEE S, JHA R, SIL N C VARIATIONAL METHOD AND THE ELASTIC SCATTERING OF SLOW ELECTRONS BY HYDROGEN ATOM  
INDIAN J PHYS, VOL 39, 455, (1965)
- 1704 BANERJEE S, JHA R, SIL N C LOW ENERGY SCATTERING OF ELECTRON BY HELIUM ATOM BY THE VARIATIONAL METHOD  
INDIAN J PHYS, VOL 39, 552, (1965)
- 1705 SCHRAH B L PARTIAL IONIZATION CROSS SECTIONS OF NOBLE GASES FOR ELECTRONS WITH ENERGY 0.5-10 KEV. II. ARGON, KRYPTON AND XENON  
PHYSICA, VOL 32, 197, (1966)
- 1706 SCHRAH B L, BOERBOOM A J H, KISTEMAKER J PARTIAL IONIZATION CROSS SECTIONS OF NOBLE GASES FOR ELECTRONS WITH ENERGY 0.5-10 KEV. I. HELIUM AND NEON  
PHYSICA, VOL 32, 185, (1966)
- 1708 JOHN T L, WILLIAMS K L THE APPLICATION OF RUBINOW'S VARIATIONAL METHOD TO ZERO ENERGY SCATTERING OF ELECTRONS BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON, VOL 88, 71, (1966)
- 1709 TREPKA L V, NEUERT H UBER DIE ENTSTEHUNG VON NEGATIVEN IONEN AUS EINIGEN KOHLENWASSERSTOFFEN UND ALKOHOLEN DURCH ELEKTRONENSTOSS  
Z NATURFORSCH, VOL 18A, 1295, (1963)
- 1710 ZELL K L, EISSA M, MOISEWITSCH B L FIRST-ORDER EXCHANGE APPROXIMATION - THE EXCITATION OF THE 2 TRIPLET S AND 2 TRIPLET P STATES OF HELIUM BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 88, 57, (1966)
- 1718 ORMOND S, SMITH K CLOSE COUPLING APPROXIMATION CROSS SECTIONS FOR THE SCATTERING OF ELECTRONS BY HYDROGEN ATOMS (IN P. 4, 5, 6)  
(IN) ATOMIC COLLISION PROCESSES, M R C McDOWELL, EDITOR, NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM, PAGE 274, 1964. PROCEEDINGS OF THE THIRD INTERNATIONAL CONFERENCE ON THE PHYSICS OF ELECTRONIC AND ATOMIC COLLISIONS (LONDON, 22-24 JULY 1963)
- 1742 CUTHBERT J, FARREN J, FRANKLADA RAO B S, PREECE E R APPEARANCE POTENTIALS AND TRANSITION PROBABILITIES FOR ELECTRON IMPACT IONIZATION OF  $C O$  AND  $C O_2$   
PROC PHYS SOC LONDON, VOL 88, 91, (1966)



- 1743 SILVERMAN S H, LASSETTRE E W INTENSITY DISTRIBUTION FOR THE  $X^1\Sigma^+ \rightarrow A^1\Pi$  TRANSITION IN CARBON MONOXIDE EXCITED BY ELECTRON IMPACT  
J CHEM PHYS, VOL 41, 3727, (1964)
- 1744 MAXWELL L R THE MEAN FREE PATH OF ELECTRONS IN MERCURY VAPOR  
PROC NATL ACAD SCI, VOL 12, 509, (1926)
- 1747 KANG I J ASYMPTOTIC BEHAVIOR OF THE BORN SCATTERING AMPLITUDES IN COLLISIONS OF ELECTRONS WITH HYDROGEN ATOMS  
PHYS REV, VOL 144, 29, (1966)
- 1748 SCHRAK B L, HOUSTAF A H R, SCHUTTEN J, DE MEER F J IONIZATION CROSS SECTIONS FOR ELECTRONS (100-600 EV) IN NOBLE AND DIATOMIC GASES  
PHYSICA, VOL 32, 734, (1966)
- 1752 WAMLIN H B THE MOTION OF ELECTRONS IN ARGON  
PHYS REV, VOL 37, 269, (1931)
- 1753 BOERSCH H, REICH H J OZILLATORENSTARKEN AUS DER DURCH SCHNELLE ELEKTROEN AMBERGESTEN LICHTEMISSION. 1. MESSUNGEN AN HELIUM  
OPTIK, VOL 22, 289, (1965)
- 1758 PENNIN H P, REDKO T P STUDY OF THE POSITIVE COLUMN OF A DISCHARGE IN CADMIUM VAPOR AND DETERMINATION OF EFFECTIVE CROSS SECTIONS OF THE 6 TRIPLET S SUB 1 LEVEL  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 20, 106, (1966)
- 1760 LASHMORE-DAVIES C N THE EXCITATION OF THE 2 TRIPLET P STATE OF HELIUM BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 86, 783, (1965)
- 1764 SHIRNOV B N, CHIBISOV N I THE BREAKING UP OF ATOMIC PARTICLES BY AN ELECTRIC FIELD AND BY ELECTRON COLLISIONS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 22, 585, (1966)
- 1767 FOX H A EXCITATION FROM THE GROUND STATE OF HELIUM TO HIGHER SINGLET 3 STATES  
PROC PHYS SOC LONDON, VOL 86, 769, (1965)
- 1770 MOISEWITSCH B L, STACEY G M THE TAMM VARIATIONAL PRINCIPLE AND ITS GENERALIZATION TO THE SCATTERING AMPLITUDE  
PROC PHYS SOC LONDON, VOL 86, 737, (1965)
- 1771 LATIMER I U, MCCONKEY J W ABSOLUTE CROSS SECTIONS FOR SIMULTANEOUS IONIZATION AND EXCITATION OF H<sub>2</sub>O BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 86, 745, (1965)
- 1772 RUOGE H R H, SCHWARTZ S B THE IONIZATION OF HE+ BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 86, 773, (1965)
- 1773 RUOGE H R H THE SCATTERING OF ELECTRONS BY HYDROGEN ATOMS  
PROC PHYS SOC LONDON, VOL 86, 763, (1965)
- 1774 POPP H P NACHWEIS DES FLUOR-AFFINITÄTSKONTINUUMS IN EMISSION  
Z NATURFORSCH, VOL 20A, 642, (1965)
- 1775 ZHUKHAREVA T V RESONANCE PHENOMENA IN THE ELASTIC SCATTERING OF ELECTRONS BY HELIUM ATOMS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 19, 474, (1965)
- 1776 KUPIYANOV S E EXCITATION FUNCTIONS OF HIGH ENERGY LONG-LIVED STATES OF INERT GAS ATOMS  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 20, 85, (1966)
- 1781 CERNAK V INDIVIDUAL EFFICIENCY CURVES FOR THE EXCITATION OF 2 TRIPLET S AND 2 SINGLET S STATES OF HELIUM BY ELECTRON IMPACT  
J CHEM PHYS, VOL 44, 3774, (1966)
- 1782 SCHUTTEN J, DE MEER F J, HOUSTAF A H R, BOERDOON A J H, KISTEMAKER J GROSS- AND PARTIAL-IONIZATION CROSS SECTIONS FOR ELECTRONS ON WATER VAPOR IN THE ENERGY RANGE 0.1-20 KEV  
J CHEM PHYS, VOL 44, 3924, (1966)
- 1786 KOZLOV G I CONDUCTIVITY OF ARGON AND RECOMBINATION COEFFICIENT  
HIGH TEMP USSR ENGLISH TRANSL, VOL 3, 467, (1965)
- 1787 GOLDEN D E, BANDEL H W, SALENNO J A ABSOLUTE TOTAL ELECTRON SCATTERING CROSS SECTIONS IN H<sub>2</sub> AND O<sub>2</sub> FOR LOW ELECTRON ENERGIES  
PHYS REV, VOL 146, 40, (1966)
- 1788 BYRN F W, JOACHAIN C J IMPORTANCE OF CORRELATION EFFECTS IN THE IONIZATION OF HELIUM BY ELECTRON IMPACT  
PHYS REV LETTERS, VOL 16, 1139, (1966)

- 1793 NIELSKI A, LOS-KOZLOWSKI T  
SEMI-EMPIRICAL FORMULA FOR THE CROSS-SECTION FOR EXCITATION OF ATOMS BY ELECTRONIC COLLISIONS, OPTICALLY ALLOWED TRANSITIONS  
ACTA PHYS POLON. VOL 2A, 555, (1965)
- 1801 ZAPESUCHNYI I P, SHIMON L L  
EFFECTIVE EXCITATION CROSS SECTIONS FOR THE RESONANT DOUBLETS OF CESIUM AND RUBIDIUM  
SOVIET PHYS DOKLADY ENGLISH TRANSL. VOL 11, 44, (1966)
- 1803 DANCE D F, HARRISON M F A, SMITH A C M  
A MEASUREMENT OF THE CROSS SECTION FOR PRODUCTION OF  $He^{+}$  IONS BY ELECTRON IMPACT EXCITATION OF GROUND STATE HELIUM IONS  
PROC ROY SOC LONDON SER A, VOL 290, 74, (1966)
- 1804 OCHKUN V I, BRATSEV V F  
EXCITATION OF HELIUM FROM THE 2 TRIPLET S STATE BY ELECTRON COLLISION  
SOVIET ASTRON AJ ENGLISH TRANSL. VOL 9, 797, (1966)
- 1805 NOICHUSS O W, STONE P M  
RADIATIVE RECOMBINATION IN CESIUM  
J QUANT SPECTRY RADIATIVE TRANSFER, VOL 6, 277, (1966)
- 1812 GEIER J, WITTMACK K  
HOCHAUFLOSENDE ELEKTRONNENSTOSSSPEKTROMETRIE DES ELEKTRONNEN- UND SCHWINGUNGSSPEKTRUMS VON ATHYLEN  
Z NATURFORSCH, VOL 20A, 628, (1965)
- 1813 VAINSHTEIN L, OPRYKHIN V, PRESHYAKOV L  
ON THE EXCITATION OF ATOMS OF ALKALI METALS  
P M LEBEDEV INSTITUTE OF PHYSICS REPORT A-53, 1964, AERE - TRANS 1018, ATOMIC ENERGY RESEARCH ESTABLISHMENT, MARWELL, BERKSHIRE, ENGLAND, 1964, 16 PAGES
- 1816 OKSYUK YU D  
EXCITATION OF THE ROTATIONAL LEVELS OF DIATOMIC MOLECULES BY ELECTRON IMPACT IN THE ADIABATIC APPROXIMATION  
SOVIET PHYS JETP ENGLISH TRANSL. VOL 22, 873, (1966)
- 1817 ORIENT O J  
APPLICATION OF A MODIFIED EFFECTIVE-RANGE THEORY TO THE ELASTIC SCATTERING OF LOW-ENERGY ELECTRONS FROM HELIUM  
ACTA PHYS HUNG, VOL 20, 203, (1966)
- 1819 DRACHMAN R J  
THEORY OF LOW-ENERGY POSITRON-HELIUM SCATTERING  
PHYS REV, VOL 144, 25, (1966)
- 1823 ZAPESUCHNYI I P, FELTSAN P V  
ON THE EXCITATION CROSS SECTIONS OF 2P LEVELS OF ARGON, KRYPTON, AND XENON  
OPT SPECTRY USSR ENGLISH TRANSL. VOL 20, 491, (1966)
- 1824 SKERBELE A, LASSETTTE E N  
INTENSITY VARIATION WITH SCATTERING ANGLE OF ELECTRONIC TRANSITIONS IN  $H_2O$  EXCITED BY ELECTRON IMPACT  
J CHEM PHYS, VOL 44, 4066, (1966)
- 1827 LABAHN H W, CALLAWAY J  
ELASTIC SCATTERING OF LOW-ENERGY ELECTRONS FROM ATOMIC HELIUM  
PHYS REV, VOL 147, 28, (1966)
- 1832 SEATON M J  
THE HARTREE-FOCK EQUATIONS FOR CONTINUOUS STATES WITH APPLICATIONS TO ELECTRON EXCITATION OF THE GROUND CONFIGURATION TERMS OF O I  
PHIL TRANS ROY SOC LONDON SER A, VOL 245, 469, (1952-53)
- 1833 FINK X, MUBER P  
WÄNDERUNGSGESCHWINDIGKEIT UND DIFFUSIONSKONSTANTE VON ELEKTRONNEN IN METHAN  
HELV PHYS ACTA, VOL 38, 717, (1965)
- 1838 NISHIMURA M  
MEASUREMENT OF THE EXCITATION FUNCTION OF  $(O_2)^+$  FIRST NEGATIVE BANDS BY ELECTRON IMPACT  
J PHYS SOC JAPAN, VOL 21, 1018, (1966)
- 1839 MENLHORN W  
AUGER ELECTRONS OF AUTOIONIZING LEVELS OF HELIUM  
PHYS LETTERS, VOL 21, 155, (1966)
- 1841 KOVAL A G, KOPPE V T, FÖBEL YA M  
C O, C O<sub>2</sub>, AND N O EMISSION SPECTRA EXCITED BY 13-KeV ELECTRONS  
SOVIET ASTRON AJ ENGLISH TRANSL. VOL 10, 105, (1966)
- 1846 BURKE P G, COOPER J A, ORMOND S  
ELECTRON-IMPACT EXCITATION OF  $n = 2$  STATES IN  $He$   
PHYS REV LETTERS, VOL 17, 345, (1966)
- 1847 BURKE P G, TAYLOR A J  
CORRELATION IN THE ELASTIC AND INELASTIC S-WAVE SCATTERING OF ELECTRONS BY  $H$  AND  $He^+$   
PROC PHYS SOC LONDON, VOL 88, 544, (1966)
- 1848 RUDGE H R H, SCHWARTZ S B  
THE IONIZATION OF HYDROGEN AND OF HYDROGENIC POSITIVE IONS BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 88, 563, (1966)

- 1849 RUDOE M R M, SCHWARTZ S B THE IONIZATION OF COMPLEX IONS BY ELECTRON IMPACT. I. IONIZATION CROSS SECTIONS FOR FE XV AND FE XVI  
PROC PHYS SOC LONDON, VOL 88, 579, (1966)
- 1850 BELY O EXCITATION OF LITHIUM-LIKE IONS BY ELECTRON IMPACTS  
PROC PHYS SOC LONDON, VOL 88, 587, (1966)
- 1851 KINGSTON A E, LAUER J E HIGH-ENERGY CROSS SECTIONS FOR ELECTRON EXCITATIONS OF EXCITED HYDROGEN ATOMS IN WHICH THE PRINCIPAL QUANTUM NUMBER IS CHANGED BY 2  
PROC PHYS SOC LONDON, VOL 88, 597, (1966)
- 1852 CHEN J C Y DIRECT AND RESONANCE ROTATIONAL EXCITATION OF MOLECULES BY SLOW ELECTRONS  
PHYS REV, VOL 146, 61, (1966)
- 1853 ZHUKHAREVA T V RESONANCE PHENOMENA IN THE ELASTIC SCATTERING OF ELECTRONS BY HELIUM ATOMS. II.  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 20, 402, (1966)
- 1856 SIMPSON J A, KUYATT C E, MIELCZAREK S R ABSORPTION SPECTRUM OF S F<sub>6</sub> IN THE FAR ULTRAVIOLET BY ELECTRON IMPACT  
J CHEM PHYS, VOL 44, 4403, (1966)
- 1858 ADAMCZYK B, BOERBOOM A J M, SCHRAM B L, KIS/EMAKER J PARTIAL IONIZATION CROSS SECTIONS OF HE, NE, N<sub>2</sub>, AND C H<sub>4</sub> FOR ELECTRONS FROM 20 TO 500 EV  
J CHEM PHYS, VOL 44, 4640, (1966)
- 1859 ORMONDE S ELECTRON EXCITATION OF HIGH N STATES IN HYDROGEN  
J CHEM PHYS, VOL 44, 4672, (1966)
- 1862 KHARE S P, NOISEWITSCH B L THE DISSOCIATION OF HYDROGEN MOLECULES BY ELECTRON IMPACT  
PROC PHYS SOC LONDON, VOL 88, 605, (1966)
- 1863 SCHRAM B L IONIZATION OF NOBLE AND MOLECULAR GASES BY HIGH ENERGY ELECTRONS  
THESIS, UNIVERSITY OF AMSTERDAM, 1966, 103 PAGES
- 1864 KARULE E M, PETERKOP R K COLLISIONS OF SLOW ELECTRONS WITH ATOMS OF ALKALI METALS  
ATOMIC COLLISIONS, PART 3, 3, (1965) AKAD NAUK LATV SSR INST FIZ, RIGA, USSR
- 1865 KARULE E M ELASTIC SCATTERING OF ELECTRONS ON ATOMS OF ALKALI METALS  
ATOMIC COLLISIONS, PART 3, 33, (1965) AKAD NAUK LATV SSR INST FIZ, RIGA, USSR
- 1866 VELORE V IA, LYASH A V, RABIK L L EXCITATION OF NEON ATOMS BY ELECTRON BOMBARDMENT  
ATOMIC COLLISIONS, PART 3, 57, (1965) AKAD NAUK LATV SSR INST FIZ, RIGA, USSR
- 1867 VELORE V IA, LYASH A V, RABIK L L EXCITATION OF NOBLE GAS ATOMS BY ELECTRON BOMBARDMENT  
ATOMIC COLLISIONS, PART 3, 85, (1965) AKAD NAUK LATV SSR INST FIZ, RIGA, USSR
- 1868 VELORE V IA, RABIK L L COMPUTATION OF EXCITATION CROSS SECTIONS OF EXCITED HYDROGEN ATOMS BY BORN'S APPROXIMATION  
ATOMIC COLLISIONS, PART 3, 145, (1965) AKAD NAUK LATV SSR INST FIZ, RIGA, USSR
- 1869 GAILITIS M COMPUTING LOWER BOUNDS FOR PHASES OF ELECTRON-HYDROGEN SCATTERING  
ATOMIC COLLISIONS, PART 3, 155, (1965) AKAD NAUK LATV SSR INST FIZ, RIGA, USSR
- 1871 LIPELES M, NOVICK R, TULK N DIRECT DETECTION OF TWO-PHOTON EMISSION FROM THE METASTABLE STATE OF SINGLY IONIZED HELIUM  
PHYS REV LETTERS, VOL 15, 698, (1965)
- 1874 COOPER J L, PRESSLEY G A, STAFFORD F E ELECTRON-IMPACT IONIZATION CROSS SECTIONS FOR ATOMS  
J CHEM PHYS, VOL 44, 3946, (1966)
- 1875 NEIL M, SCOTT B CESIUM IONIZATION CROSS SECTION FROM THRESHOLD TO 50 EV  
PHYS REV, VOL 145, 279, (1966)
- 1876 PETRINI O EXCITATION PAR CHOCS ELECTRONIQUES DES TRANSITIONS 4S TO 4P, 4S TO 3D, 3D TO 4P DU CA II ET 6S TO 6P, 6S TO 5D, 5D TO 6P DU BA II  
COMPT REND, VOL 260, 4929, (1965)
- 1877 MCCARROLL R L'EXCITATION DES ATOMES NEUTRES PAR CHOCS ELECTRONIQUES  
COMPT REND, VOL 260, 6944, (1965)

- 1878 VINKALNS I ZH IONIZATION OF THE HYDROGEN ATOM BY SLOW ELECTRONS  
ATOMIC COLLISIONS, PART 2, 87, (1965) AKAD NAUK LATV SSR  
INST FIZ, RIGA, USSR
- 1879 VINKALNS I ZH THE EFFECT OF INCIDENT WAVE DISTORTION ON PARTIAL  
IONIZATION CROSS SECTIONS OF THE HYDROGEN ATOM  
ATOMIC COLLISIONS, PART 2, 97, (1965) AKAD NAUK LATV SSR  
INST FIZ, RIGA, USSR
- 1880 TISON G C MEASUREMENT OF THE CROSS SECTION FOR DETACHMENT OF ELECTRONS  
FROM THE NEGATIVE HYDROGEN ION BY ELECTRON IMPACT  
THESIS, UNIVERSITY OF COLORADO, BOULDER, COLORADO, 1966,  
96 PAGES
- 1886 COLEMAN J P APPLICATIONS OF THE IMPULSE APPROXIMATION TO ATOMIC  
COLLISION PROCESSES  
THESIS, UNIVERSITY OF DURHAM, DURHAM, ENGLAND, (1965),  
208 PAGES
- 1887 SKERBELE A, MEYER V D, LASSETTRE E M VIBRATIONAL INTENSITIES OF THE  $A^1\Pi + X^1\Sigma^+$  TRANSITION  
IN CARBON MONOXIDE  
J CHEM PHYS, VOL 44, 4049, (1966)
- 1891 ABERTH W M MEASUREMENT OF TOTAL CROSS SECTIONS FOR THE SCATTERING OF  
LOW ENERGY ELECTRONS BY ARGON AND MOLECULAR OXYGEN AND  
NITROGEN  
THESIS, NEW YORK UNIVERSITY, 1963, 57 PAGES, UNIVERSITY  
MICROFILMS, INC, ANN ARBOR, MICHIGAN, NO. 64-6448
- 1892 MOLT M K THE EXCITATION OF THE 2 SINGLET S, 2 TRIPLET S, AND 2  
TRIPLET P STATES OF HELIUM BY ELECTRON BOMBARDMENT  
THESIS, YALE UNIVERSITY, 1965, 126 PAGES, UNIVERSITY  
MICROFILMS INC, ANN ARBOR, MICHIGAN, NO. 65-15,059
- 1894 SCHENTER R E, THALER R M SCATTERING OF SLOW ELECTRONS FROM HELIUM ATOMS  
PHYS REV, VOL 146, 70, (1966)
- 1895 ZAPESCHNYI I P, FELTSAN P V EXCITATION OF INERT GASES IN ELECTRON-ATOM COLLISIONS  
UKR FIZ ZH, VOL 11, 1197, (1965)
- 1897 CROWN J C THE ELECTRON ALKALI-ATOM INTERACTION POTENTIAL AND ELASTIC  
SCATTERING CROSS SECTION  
THESIS, UNIVERSITY OF CONNECTICUT, 1965, 68 PAGES, UNIVERSITY  
MICROFILMS INC, ANN ARBOR MICHIGAN, NO. 66-835
- 1898 KYLE M L NONADIABATIC THEORY OF INELASTIC ELECTRON-HYDROGEN SCATTERING  
THESIS, UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, 1964,  
74 PAGES, UNIVERSITY MICROFILMS INC, ANN ARBOR, MICHIGAN,  
NO. 65-9034
- 1900 KLEINMAN C J HIGHER PARTIAL WAVES IN POSITRON HYDROGEN ELASTIC SCATTERING  
THESIS, NEW YORK UNIVERSITY, 1965, 118 PAGES, UNIVERSITY  
MICROFILMS INC, ANN ARBOR, MICHIGAN, NO. 65-9312
- 1905 PETERKOP R K RULE OF EXCHANGE IN ELECTRON SCATTERING BY HELIUM ATOMS  
LATVIJAS PSR ZINATNU AKAD VESTIS, NO. 3, 47, (1965)
- 1909 MAZING M A, VRUBLEVSKAYA N A SPECTROSCOPIC INVESTIGATION OF THE ELASTIC SCATTERING  
OF SLOW ELECTRONS BY CESIUM AND ARGON ATOMS  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 23, 228, (1966)
- 1910 KORCHEVOI YU P, PRZHONSKI A M EFFECTIVE CROSS SECTION FOR THE INELASTIC COLLISIONS OF  
SLOW ELECTRONS WITH CESIUM ATOMS IN THE PRE-THRESHOLD REGION  
SOVIET PHYS JETP ENGLISH TRANSL, VOL 23, 208, (1966)
- 1916 CONNOLLY J G, SIMELEUS K G, LATIMER I D, MCCONKEY J W ELECTRON BEAM EXCITATION OF MOLECULAR SPECTRA  
TRANS FARADAY SOC, VOL 61, 1557, (1965)
- 1919 FIQUET-FAYARD P COMPARAISON DES IONISATIONS SIMPLE ET DOUBLE PAR IMPACT  
ELECTRONIQUE ENTRE 250 ET 2200 EV  
J CHIM PHYS, VOL 62, 1065, (1965)
- 1920 ZIESEL J P FORMATION D'IONS MULTIPLEMENT CHARGES DU NEON, DU SODIUM  
ET DU MAGNESIUM PAR IMPACT ELECTRONIQUE DE 250 A 2000 EV  
J CHIM PHYS, VOL 62, 127, (1965)
- 1924 SCHULZ G J, KOONS M C ENERGY LEVELS OF THE COMPOUND STATE OF  $H_2$  NEAR 2.0 EV  
J CHEM PHYS, VOL 44, 1297, (1966)
- 1932 KRUEBER T K, CIVZAK S J ATOMIC WAVE FUNCTIONS, COLLISION CROSS-SECTIONS, AND  
TRANSITION PROBABILITIES OF FE 10-8  
NEW ROY ASTRON SOC, VOL 69, 145, (1964-65)

- 1943 CZYZAK S J, KRUEGER T K  
ON THE EXCITED LEVELS OF Fe VIII  
ASTROPHYS J, VOL 144, 341, (1966)
- 1962 GOLDEN D E, BANDEL H W  
LOW-ENERGY E (ELECTRON) - AR TOTAL SCATTERING CROSS  
SECTIONS - THE RAMSAUER-THOMSEN EFFECT  
PHYS REV, VOL 149, 58, (1966)
- 1972 ZAPESCHNYI I P, SHIMON L L  
EFFECTIVE EXCITATION CROSS SECTIONS OF ALKALI-METAL ATOMS  
COLLIDING WITH SLOW ELECTRONS. IV. CESIUM  
OPT SPECTRY USSR ENGLISH TRANSL, VOL 20, 421, (1966)
- 1982 DOE 'NG J P  
LOW-ENERGY LARGE-ANGLE ELECTRON SCATTERING SPECTRUM OF  
HELIUM  
J CHEM PHYS, VOL 45, 1065, (1946)
- 1985 FAISAL F, HARUN-AR-RASHID A M  
INELASTIC SCATTERING OF ELECTRONS FROM HYDROGEN  
J NAT SCI MATH, VOL 5, 15, (1965)
- 1987 HAYAKAWA S, KUMAZAKI T,  
NISHIMURA H, OTSUKA M  
MEASUREMENT OF THE EXCITATION FUNCTION OF (N2)+ FIRST  
NEGATIVE BANDS BY ELECTRON IMPACT  
REPORT IPPJ-42, INSTITUTE OF PLASMA PHYSICS, NAGOYA  
UNIVERSITY, NAGOYA, JAPAN, 17 PAGES, SEPT 1985
- 2002 PETERKOP R K  
EXCHANGE OF ELECTRONS DURING THE COLLISIONS OF ELECTRONS  
WITH ATOMS  
ATOMIC COLLISIONS, PART 2, 105, (1965) AKAD NAUK LATV SSR  
INST FIZ, RIGA, USSR, AERE TRANSL 1053, HARWELL, ENGLAND

# AUTHOR INDEX

ABERTH W 846 1891  
 ADAMCZYK M 1858  
 ADEN A L 698  
 AMEARN A J 1239  
 AKENIO R 276 913 996  
 ALLEN C W 923  
 ALLEN M W 273  
 ALLEN L H 876 1216  
 ALLISON U C S 1494  
 ALLIS W P 25 106  
 ALTSCHULER S 365 395 396 403  
 AMEMIYA A 248  
 ANDERSON J M 306 316 317  
 ARMSTEAD R C 1580  
 ARNOT F L 50 52 65 69 144  
 156 191 245 1142  
 ARNOQUIST W N 163  
 ASUNDI R K 626 743 847 936 940  
 1592  
 ATKINSON W R 241  
 AUMHEY B B 177 1490  
 WACON R M 1568  
 BAEHWALD H 170  
 BAILEY J E 683  
 BAILEY T L 1117  
 BAILEY V A 159 195 197 199 201  
 682  
 BAINES G O 69 156  
 BAKER F A 1492  
 BAKIS R 965  
 BALLING L C 522 1346  
 BANDEL M W 869 1375 1787 1962  
 BANERJEE S 1703 1704  
 BANNON J 203  
 BANHANGER E 386  
 BANBIERE D 397  
 BARNES L L 1251  
 BANTKY C O 1557 1558  
 BATES D R 71 146 243 423 444  
 1141 1180  
 BAUER E 368 821 1557 1554  
 BAUER N 456  
 BAYES K D 687  
 BEACH J Y 456  
 BECKER P M 311 555 1100 1212  
 BEDERSON B 16 329 846 1493  
 BEGUN G M 1116  
 BEKEFI B 360  
 BELL K L 351 822 1469 1710  
 BELL M E 215  
 BELOUSOVA I M 929

BELY O 547 775 970 1305 1448  
 1696 1850  
 BENADE J M 674  
 BENNETT W H 42  
 BENNETT W 1196  
 BERNAN A 187 372 794  
 BERNSTEIN M J 188  
 BEUTHE M 172  
 BHALLA M S 948  
 BHATTACHARYYA T 514  
 BIALECKE E P 703  
 BIERMAN L M 1059  
 BIELSKI A 1793  
 BILINSKY S 1294  
 BIONDI M A 131 541 1064 1344  
 BLAHA M 437  
 BLAIS N C 566  
 BLANC C 986  
 BLANC D 986  
 BLEAKNEY W 9 12 35 228 1095  
 BOECKNER C 764 1213  
 BOERHOOF A J H 1706 1782 1858  
 BOERSCH M 1065 1585 1753  
 BOGDANOVA I 222 476 1324 1534  
 BOIKOVA R F 1681  
 BOKSFENBERG A 491 1106  
 BONHAM R A 875  
 BOROWITZ S 384 389 393 511 913  
 967  
 BORTNER T E 1016  
 BOWE J C 819  
 BOWMAN C R 1374  
 BOYD R L F 335 491  
 BOYD T J M 419  
 BOYET M 393  
 BRACKETT J W 1579  
 BRACKMANN R T 280 320 321 322 123  
 326 332 1525  
 BRANDT A F 116  
 BRANSCOMB L 38 90 839 1004 1197  
 BRANDEN R H 416 425 429 436 440  
 1495  
 BRASFIELD C J 232  
 BRATSEV V F 1682 1804  
 BRATJIN W 231  
 BREDIS M A 640  
 BREFNE R B 574 834 919  
 BREEN F M 287  
 BRENN J J 149  
 BREIO E L 1564  
 BRICOUT P 656  
 BRIGLIA D O 988 1184 1292 1372 1396  
 1410 1491 1460 1543  
 BRINK B 150 777 1217  
 BRION C E 985

BRODE R B	1	6	8	13	46
	47	219	1007		
BRONCO C J	742				
BROSE M L	203				
BROWNE M N	421				
BROWN S C	312	314	360	594	1400
BRUCHE E	77	79	80	92	84
	85	89	259		
BRUECKNER K A	399				
BUCHDAHL R	134				
BUCHMELNIKOVA I S	766				
BUCKINGHAM R A	70	243			
BULEWICZ E M	1041				
BULLARD E C	49	53	138	267	
BUNDY F P	39				
BUNYAN P J	109	1424			
BUNCH D S	38				
BURGESS A	57	417	715	735	892
BURMOP E M S	140				
BUNKE P O	83	151	162	669	874
	918	1009	1015	1080	1340
	1436	1653	1846	1847	
BURKE V M	44	162	712		
BURNS J F	410	591			
BURTT B P	347				
BYATT M J	388	597			
BYRON F W	1768				
CALLAWAY J	976	1342	1827		
CAPLINGER E	1268				
CARLETON N P	992				
CARSON T R	434				
CARTER C	421				
CERMAK V	1572	1781			
CHAMBERLAIN G F	922	1304	1373	1417	1527
	1692	1693			
CHAMPION K S W	698				
CHANDRASEKHAR S	287				
CHANIN L M	131				
CHEN C L	182	249	739	1019	
CHEN J C Y	207	895	962	964	1852
CHESHIRE I M	645				
CHIBISOV M I	818	1764			
CHILDS E C	62	64	1286		
CHOUDHURY A L	1659				
CHOW R K M	1342				
CHRISTOPHOLOU L O	1565				
CHRISTOPH W	290				
CILLIE O	295				
CIRIO I	142				
CLARKE E M	854	1089	1509	1512	
CLOUTIER O O	481				
COCHRAN L W	685				
COOY W J	933				

COMET M M	1485				
COLEMAN J P	1479	1697	1886		
COLES S B	620				
COLLIN J	531				
COMPTON K T	2	674			
COMPTON R N	1565				
CONNOLLY J O	1916				
CONNOR T R	1344				
COOK C J	153				
COOLIDGE A S	987				
COOPER J L	1874				
COOPER J W	1057	1846			
CORINALDESI E	28				
CORRIGAN S J B	336	354	1566		
COTTIN M	483				
COURT A R	887				
CRABBS J D	337	346	357	847	850
	861	885	867	938	940
	948	950	1116	1231	
CRAWFORD C K	659				
CROMPTON R W	352	1489			
CROTHERS D	1532				
CROWN J C	1343	1397			
CROZIER W D	623				
CUNNINGHAM G M	1109				
CUNLEY E K	1512				
CURRAN R K	133	971	1066	1067	
CUTHBERT J	1742				
CZYZAK S J	442	1932	1943		
DAHLER J S	311	555			
DAIBER J W	1577				
DALBARN A	416	436	440	702	1341
DAMBURG R	32	91	97	148	154
	278	296	507	542	609
	648	810	835	836	856
	1505	1550	1551	1552	1553
DANCE D F	1803				
DASHCHENKO A I	78				
DEBEILH A	986				
DEHNELT M O	679				
DEICHSEL M	1425	1427	1431	1596	
DEMKOV Y N	457				
DE HEER F J	1281	1690	1748	1782	
DE LA RIPELLE F	1144				
DE MARIA O	1578				
DE VISSER J O S	643				
DESPREZ-REBAUD S	441				
DEVORE R V	256				
DEVYATOV A M	474	607	755	1325	1533
DIBELER V M	466	525			
DIBELIUS N R	768				
DOERING J P	920	1082			
DOLDER K T	261	264	907		

DOLGOV G	753	754			
DONNAN P M	770	1060	1069	1070	1108
	1691				
DORRESTEIN R	123	124			
DOUGAL A A	233	703	1450		
DOWELL J T	1310				
DRACHMAN R J	1192	1019			
DRAWIN M W	484	1044			
DUBOVOL L V	1507				
DUBAN J V	1272				
DUKELSKII V M	957				
DUNN G M	344	1501	1503		
DYMOND E G	3	253			
EBINGHAUS H	1163				
EDELSTEIN L A	695				
EDMISTEN W C	190				
EMRHARDT H	1470	1529	1508		
EISSA M	1710				
EISSNER W	1560				
ELLENBAAS W	100	1148			
ELSASSER W	103				
CHELEUS K G	1914				
EMMANUEL C B	1058				
ENOE W	1153				
ENGELHARDT A G	210	260	292		
ENGLANDER-GOLDEN	1105	1410	1459		
ENGLANDER P	16				
ERSKINE G A	458				
FABRIKANT V	142	275			
FAIRE A C	698				
FAISAL F	1905				
FANO U	362				
FARREN J	1742				
FEENBERG E	221				
FELDMAN P	773				
FELTSAN P V	1076	1503	1640	1023	1895
FIELD F M	340				
FIJNAUT M P	1570				
FINEHAN M	941	1415	1500	1519	
FINK X	1033				
FIQUET-FAYARD P	203	1124	1162	1167	1530
	1919				
FIRSOV O B	010				
FISCHER O	115				
FISHER L	445				
FISK J B	34	37			
FITE W L	280	320	321	322	323
	320	332	1031	1925	
FLAVIN R K	769	850	872		
FLEMING R J	518	871	1000		
FOGEL YA M	1041				
FOWER S M	1034	1132			
FORESTER D W	685				
FOWLEN R G	241	742	912		

FOX H A	1695	1767			
FOX R E	133	271	310	318	353
	467	704	707	776	781
	850	1004	1067	1119	1529
FRADWIN E E	1661				
FRANCIS S A	192				
FRANKEN P	610				
FRANKLIN J L	340				
FRASER P A	571	744	855	1022	1422
FRENKIEL P	499	944			
FRISH S E	464	808	1233	1531	
FROMMHOLD L	973				
FROST D C	341	523	524	526	699
	708	1120	1263		
FROST L S	101	888	1043	1062	
FUCHTBAUER C	116	117	118		
FUHRMANN H	289				
FUNDINGSLAND O T	312	698			
FUNK H	88				
FYODOROV V L	1575				
GABATHULER E	334	338			
GABRIEL A H	886				
GAERTNER H	175				
GAUSF A P	164				
GAILITIS M	296	609	648	835	1487
	1869				
GAJEWSKI T	592				
GARRETT W R	36	959	1498	1523	
GERALLE R	167				
GEERK J	527				
GEIGER J	1005	1303	1478	1505	1597
	1012				
GEITSI I I	222	1534			
GELTMAN S	38	244	390	415	533
	1093	1125	1452	1477	1606
GERJUOV E	386	392	401	448	
GHOSH H	1308				
GHOSH S P	920				
GIBBONS J J	1402				
GILARDINI A L	1400				
GILBODY M B	1031				
GLASER F M	612				
GLICK R Z	946				
GLOCKLER G	209	235			
GOLANT V E	801				
GOLDAN P D	274	1348			
GOLDEN D E	869	1375	1787	1962	
GOLDFINGER P	1570				
GOLDSTEIN L	233	249	274	277	300
	316	317	1348		
GOODRICH M	905				
GORSCHANOVA A P	32				
GOSLER P	117				
GOULD L	314				
GRAHAM W J	734				
GRAY E P	391				



GREENBERG H 384 967  
 GREEN G W 335  
 GREEN M C 164  
 GROB V C 1270  
 GROSJEAN C C 828  
 GRYZINSKI M 452 570 863 1614  
 GUHA B K 1519  
 GUIER W M 391  
 GUK SIN SAN 1325  
 GURCHUNELIYA A D 1516  
 GUREVICH U B 929  
 GYFTOPOULOS E P 1456  
 HAAS R 684  
 HADEISHI T 205 1339  
 HAFNER H 1586  
 HAFT S 111  
 HAUSTRUM H D 107 214  
 HAMM Y 1443 1496 1499 1520  
 HAIDT D 1538  
 HALL B I M 1428  
 HAMMERLING P 407  
 HAMMER J M 177 538  
 HANLE W 92 152 179 263 304  
 HANNAY N B 1239  
 HANSEN L K 1063  
 HANSON E E 1518  
 HANSON M P 1089 1509  
 HANSON R J 522  
 HARA Y 408 463 552  
 HARKNESS R V 1896  
 HARNWELL G P 158 230  
 HARRIES W 98  
 HARRISON M 974  
 HARRISON M F A 261 264 987 1883  
 HARRIS L P 1473  
 HARRIS W 469  
 HART R W 391  
 HARUN-AR-RASHID A 1905  
 HASHINO T 565 849  
 HASTED J B 1492  
 HASTINGS J M 465  
 HAUPT C R 14  
 HAYAKAWA S 1123 1987  
 HAYAKAWA T 539  
 HEALEY R M 677 682  
 HEDD M 265  
 HEDDLE D W O 519 886 922 1513  
 HEIDEMAN H B M 516 1417 1527 1492 1693  
 HEIL M 1078  
 HELUND E J 889  
 HENDERSON B R 1525  
 HENDRICKSON G B 1072

HENNFREB W 653 655  
 HENRY R J M 702  
 HERBENROTHER R C 1001  
 HERRMAN O 788  
 HERTZ B 663  
 HERZENBERG A 1331  
 HEY W 1279  
 HICKAM W M 271 310 313 704 850  
 HIGGINSON G S 518 871 1027 1088  
 HILL E R 485  
 HILL S 1287  
 HIPPLE J A 213  
 HIRSHFIELD J L 594  
 HOBART J 610  
 HODGES M L 1894  
 HOERNI J A 572  
 HODNESS T R 1894  
 HOLST W 991  
 HOLT M K 1528 1677 1802  
 HOLT M B 802  
 HOLTSMARK J 99 104 185 991  
 HOOPER J W 1421 1588  
 HOPWOOD W 346  
 HUANG K 297  
 HUANG S S 127  
 HUBER P 1833  
 HUCK R J 580  
 HUDSON R L 1132  
 HUGHES A L 20 23 27 145 469  
 628 629 726 1001 1004  
 1277 1294  
 HUGHES R M 554 787 1072  
 HUGHES V W 1195 1196  
 HUMMER D B 332 1037  
 HURST G S 1016 1505  
 HUSAIN D 1659  
 MUSTULIO A 924  
 HUTCHISON D A 1215  
 MUZINABA C 462  
 IBERS J A 572  
 INOKUTI M 210 1056  
 INUT T 248  
 IOLIN Y 1426  
 ITOH T 705  
 IVASH E V 378  
 JAMODA F C 682  
 JEFFRIES J T 963  
 JEN C K 1166  
 JESSE V P 625  
 JHA R 1783 1784  
 JOACHAIN C J 1644 1645 1788  
 JOHN T L 410 899 1788  
 JOHNSON R A 882

JONES E A	881	884	1265		
JONES F L	1297				
JONES H A	637				
JONES T J	4	157			
JONGERUS H M	176	315	513	544	
JORDAN E B	219	1082			
JORTNER J	1485				
JORY R L	1489				
KALLMAN H	660				
KAMENETSKII V D	220	557	795		
KAMEKO Y	1038	1039	1045		
KANG I J	1747				
KANOMATA I	1045				
KAPTSOV H A	607				
KAHLE J	875	983			
KAR R C	676	1283			
KARULE E M	148	844	990	1097	1426
	1469	1491	1515	1542	1547
	1884	1865			
KATO T	362				
KAY R B	554				
KEEPE W M	654				
KEESING R W W	1512				
KENTY C	355				
KERNER E M	394	402			
KERR L W	1027				
KESSLER J	486	1574			
KESTNER N H	1485				
KHARE S P	1407	1408	1493	1862	
KHASHABA S	418				
KHVOSTENKO V I	957				
KIEFFER L J	364				
KING N M	436				
KINSTON A E	146	350	444	544	825
	1025	1506	1595	1657	1694
	1891				
KINNEY J D	1104				
KISER R W	1137				
KISHKO S H	343	475	782	757	1047
	1648				
KISTENAKER J	1281	1766	1782	1856	
KIVEL B	325	487	449	459	
KIVELSON D	687				
KJELDAAS T	310	784			
KLEINMAN C J	1569	1988			
KLEINPOPPEN H	832	1538	1806	1843	
KLEIN N M	389	396	1138		
KNOX B E	367				
KOGAN V I	587				
KOLESHNIKOV V M	493				
KOLLATH R	86	87	93	94	95
	129	174			
KOLDS U	898	890			
KOONS H C	1024				
KOPPE V T	1841				

KORCHEVOI YU P	132	1910			
KOVAL A B	1841				
KOZLOV G I	1891	1786			
KRALL N A	448				
KRASHOV H E	372	373	375	376	381
	794	798	800	812	
KRAUS K	1163				
KRAUSS H	5	525			
KRAVCHENKO V	810				
KROPP A	5				
KROTKOV R	1528	1677			
KRUEGER T K	442	1932	1943		
KRUGER H	532	1538	1886		
KRUITHOF A	270				
KUCHINKA M YU	752				
KULANDER J L	1058				
KUMAZAKI T	1987				
KUMKEL W B	759				
KUPRIYANOV S E	713	723	1776		
KURALOVA A V	474				
KUREPA M V	743	938	1484		
KUYATT C E	308	692	1085	1347	1471
	1527	1692	1693	1896	
KYLE H L	904	908	1898		
LABAHN R W	976	1376	1827		
LAMMANI M	1124				
LAND V E	227				
LANTYIN J C	1038				
LAMPE F W	346	1168			
LANE F O	597				
LANE N F	568	1251	1414		
LANGSHIR I	637				
LANGSTROTH G O	632	1298	1312		
LARCHE K	105				
LASHMORE-DAVIES C	1788				
LASSETTRE E M	372	373	374	375	376
	377	378	379	380	381
	382	383	384	385	386
	387	388	389	390	391
	392	393	394	395	396
	397	398	399	400	401
	402	403	404	405	406
	407	408	409	410	411
	412	413	414	415	416
	417	418	419	420	421
	422	423	424	425	426
	427	428	429	430	431
	432	433	434	435	436
	437	438	439	440	441
	442	443	444	445	446
	447	448	449	450	451
	452	453	454	455	456
	457	458	459	460	461
	462	463	464	465	466
	467	468	469	470	471
	472	473	474	475	476
	477	478	479	480	481
	482	483	484	485	486
	487	488	489	490	491
	492	493	494	495	496
	497	498	499	500	501
	502	503	504	505	506
	507	508	509	510	511
	512	513	514	515	516
	517	518	519	520	521
	522	523	524	525	526
	527	528	529	530	531
	532	533	534	535	536
	537	538	539	540	541
	542	543	544	545	546
	547	548	549	550	551
	552	553	554	555	556
	557	558	559	560	561
	562	563	564	565	566
	567	568	569	570	571
	572	573	574	575	576
	577	578	579	580	581
	582	583	584	585	586
	587	588	589	590	591
	592	593	594	595	596
	597	598	599	600	601
	602	603	604	605	606
	607	608	609	610	611
	612	613	614	615	616
	617	618	619	620	621
	622	623	624	625	626
	627	628	629	630	631
	632	633	634	635	636
	637	638	639	640	641
	642	643	644	645	646
	647	648	649	650	651
	652	653	654	655	656
	657	658	659	660	661
	662	663	664	665	666
	667	668	669	670	671
	672	673	674	675	676
	677	678	679	680	681
	682	683	684	685	686
	687	688	689	690	691
	692	693	694	695	696
	697	698	699	700	701
	702	703	704	705	706
	707	708	709	710	711
	712	713	714	715	716
	717	718	719	720	721
	722	723	724	725	726
	727	728	729	730	731
	732	733	734	735	736
	737	738	739	740	741
	742	743	744	745	746
	747	748	749	750	751
	752	753	754	755	756
	757	758	759	760	761
	762	763	764	765	766
	767	768	769	770	771
	772	773	774	775	776
	777	778	779	780	781
	782	783	784	785	786
	787	788	789	790	791
	792	793	794	795	796
	797	798	799	800	801
	802	803	804	805	806
	807	808	809	810	811
	812	813	814	815	816
	817	818	819	820	821
	822	823	824	825	826
	827	828	829	830	831
	832	833	834	835	836
	837	838	839	840	841
	842	843	844	845	846
	847	848	849	850	851
	852	853	854	855	856
	857	858	859	860	861
	862	863	864	865	866
	867	868	869	870	871
	872	873	874	875	876
	877	878	879	880	881
	882	883	884	885	886
	887	888	889	890	891
	892	893	894	895	896
	897	898	899	900	901
	902	903	904	905	906
	907	908	909	910	911
	912	913	914	915	916
	917	918	919	920	921
	922	923	924	925	926
	927	928	929	930	931
	932	933	934	935	936
	937	938	939	940	941
	942	943	944	945	946
	947	948	949	950	951
	952	953	954	955	956
	957	958	959	960	961
	962	963	964	965	966
	967	968	969	970	971
	972	973	974	975	976
	977	978	979	980	981
	982	983	984	985	986
	987	988	989	990	991
	992	993	994	995	996
	997	998	999	1000	1001
	1002	1003	1004	1005	1006
	1007	1008	1009	1010	1011
	1012	1013	1014	1015	1016
	1017	1018	1019	1020	1021
	1022	1023	1024	1025	1026
	1027	1028	1029	1030	1031
	1032	1033	1034	1035	1036
	1037	1038	1039	1040	1041
	1042	1043	1044	1045	1046
	1047	1048	1049	1050	1051
	1052	1053	1054	1055	1056
	1057	1058	1059	1060	1061
	1062	1063	1064	1065	1066
	1067	1068	1069	1070	1071
	1072	1073	1074	1075	1076
	1077	1078	1079	1080	1081
	1082	1083	1084	1085	1086
	1087	1088	1089	1090	1091
	1092	1093	1094	1095	1096
	1097	1098	1099	1100	1101
	1102	1103	1104	1105	1106
	1107	1108	1109	1110	1111
	1112	1113	1114	1115	1116
	1117	1118	1119	1120	1121
	1122	1123	1124	1125	1126
	1127	1128	1129	1130	1131
	1132	1133	1134	1135	1136
	1137	1138	1139	1140	1141
	1142	1143	1144	1145	1146
	1147	1148	1149	1150	1151
	1152	1153	1154	1155	1156
	1157	1158	1159	1160	1161
	1162	1163	1164	1165	1166
	1167	1168	1169	1170	1171
	1172	1173	1174	1175	1176
	1177	1178	1179	1180	1181
	1182	1183	1184	1185	1186
	1187	1188	1189	1190	1191
	1192	1193	1194	1195	1196
	1197	1198	1199	1200	1201
	1202	1203	1204	1205	1206
	1207	1208	1209	1210	1211

LEVIN F S	1086				
LEWIS B A	1536	1653			
LICHTEN W	327				
LILIENTHAL D	82				
LINDEMAN M	110	112	269		
LINDER F	1508				
LINDEMER H	486	1535			
LINERBERGEN W C	1421	1568			
LIN CHUN C	485	564	568	942	1049
	1109	1251	1345	1544	
LIN M E	25				
LIN S C	325				
LIPELES M	1871				
LIPPMAH W A	1033				
LISAK J W	29				
LLEWELLYN J A	946				
LOCHE-MOLTGREVEN	1316				
LONGHIRE P S	551	1480			
LOS-KOZLOWSKI T	1793				
LOVENIUGE L E	141				
LOWE P	628	629			
LOZIER W W	667	1402			
LUCAS C M	519				
LUNT R W	652				
LYASH A V	1554	1555	1576	1966	1867
LYNN N	563				
LYUBIMOV A P	1081				
MACHAIR D	1094				
MAECKER M	305	559			
MAGEE J L	962				
MAHAN B M	920				
MAIER-LEIBNITZ M	119				
MAIMAN T M	227				
MARINSON M E B	683				
MALASPINA L	1578				
MALESSET C	986				
MALIK F W	520	864	879	1046	1114
	1121	1659			
MANGEL F	1331				
MANN J B	566	1261			
MANN M M	924				
MANN R A	36	959			
MANCH N M	421				
MARDER S	1194				
MARINO L L	26	868	978	1013	1018
MARRIOTT J	950	1118			
MARRIOTT R	420	426	866	1654	
MARTIN J M	1057				
MARTYNEKO YU V	818				
MASSEY M S W	49	51	53	94	61
	62	64	68	75	71
	138	139	184	194	234
	243	251	267	284	349
	398	405	418	428	438
	441	458	460	616	845
	905	933	1141	1140	1388

MATOGA I	780				
MATSUDA M	565	849			
MAURER W	880				
MAXWELL L R	1746				
MAYER M F	72				
MAZING M A	1909				
MCCARROLL R	44	162	474	670	1532
	1877				
MCCLEURE B T	802				
MCCONKEY J W	1504	1771	1916		
MCCOYD G C	103	446			
MCCRFA D	413				
MCCUTCHEN C W	598				
MCDANIEL E W	1421				
MCDONOGALL J	55				
MCDOWELL C	341	523	524	526	699
	788	1120	1230	1231	1263
MCDOWELL M R C	307	470	673	1102	1110
	1246	1256	1299	1479	1697
MCEACHMAN H P	971	744	855	1022	1422
MCFADDEN T	211				
MCFARLAND R M	492	510	521	747	1473
	1104	1484	1502		
MCGOWAN W	1089	1415	1508	1509	1512
MCHARRIS O A	1339				
MCINTYRE M A J	1494				
MCKEE J S C	425	429			
MCKINQAN T V M	413				
MCLAUGHLIN J C	1152				
MCMILLEN J M	11	20	23	27	30
	185	726	1004		
MCVICAR D D	669	1080	1340		
MCHWINTER R W P	146	444	602		
MEHLHORN W	1839				
MEISTER G	1470	1529	1588		
MELTON C E	958	1116			
MENZEL D M	265				
MEYERAND R G	769	850	872		
MEYER R D	1489				
MEYER V D	551	612	1205	1418	1419
	1679	1887			
MICHAEL J A	1165				
MICHELIS W C	15	226			
MIELCZAREK S R	1085	1347	1373	1471	1456
MIES F W	969				
MIINA J	365				
MILATZ J M W	122	125	268		
MILFORD S M	103	445	446	540	919
	1850				
MILLER F L	1849	1455			
MILLER W D	1374				
MILLER W F	859				
MINKOWSKI R	178	188			
MIRLYN D N	149				
MISKELLY D	423				
MITRA S R	928				

HITTLERMAN M H	953	1044	1045	1073	
HJOLSHES R C	1002	1073	1075		
HOFFETT R J	1301				
HOMER F L	279	764	1213		
HOMER C B O	91	54	58	59	61
	63	66	68	130	150
	284	441	616		
HOISEWITSCH B L	349	350	351	367	390
	405	438	459	460	471
	495	546	549	822	914
	1024	1219	1257	1400	1493
	1494	1710	1770	1862	
HOMAN J E	331				
MOORES D	1448				
HORAND H	461				
HORWALIS H D	132				
HORRISON J D	242	778	1000	1009	1070
	1107	1100	1244		
HORRISSEY J J	910				
HORSE P M	25	106	639	1010	
HOTT N F	40	136			
HOUSA A M	905	908			
HOUSTAF A M R	1000	1740	1702		
HUMMERJEE S C	519	1040	1190		
HULLANCY B J	700				
HULLER-OUTSING W	1163				
MULLER F	1530				
HUMFORD A J P	859				
MURAVEY V T	977	901			
MUSCHLITZ E E	166	1117			
MUSHA T	765				
MYERSCOUGH V P	1102	1110	1299	1539	1569
NABAHARA S	411				
NAKAO T	7	33	130	135	
NALL B H	1034				
NARDONE H C	574	936			
NEVERT M	527	1163	1709		
NEU H	147				
NEWMALL H F	41				
NEWTON A S	1301				
NEYHABER R	26	060	970	1013	1010
	1268				
NICHOLSON A J C	242	778	1069		
NICOLL F M	50	59	63	66	137
NIERENBERG W A	1339				
NIIRA K	294				
NISSEY J S	109				
NISHIMURA H	1123	1700	1030	1007	
NOLAN J F	1467				
NORCROSS D W	1005				
NORMAND C E	10				
NORMAN S E	1039				
NOTTINGHAM W B	40				
NOVICK R	773	1071			
NOVOBRANTSEY I V	560				
NUTT O L	097				

OBEDOV V O	1007				
ODUNHOV-DEWISOY V	493				
ODUNHOV V I	349	710	935	1215	1541
	1682	1004			
ODUNHOV H	501				
ODUNHOV T	400	403	532	561	
OKELLY L H	1016				
OKSTUN YU D	1016				
OLDENAN J	112				
OLDENBERG O	992				
OLMSTED J	1301				
OMALLEY T F	60	321	1004	1043	1490
ONIDVAR K	537	553	848	1071	1450
	1466	1526			
OPIN U	432				
OPYKHIN V	1013				
ORIENT O J	1017				
ORONHOE S	710	1044	1059		
ORNSTEIN L S	100	110	112	268	269
	270				
OSTENSEN F	229				
OSTERBROCK D E	043				
OTSUKA H	1007				
OTVOS J W	539				
PACK J L	439	536	800		
PALMER R R	21	101			
PAVLOV S I	1001				
PEACH B	073	1273	1299	1654	1655
PEARSON J M	103				
PECUL K	250				
PEEK J M	1035	1405			
PENKIN M P	1752				
PENNEY W B	19				
PERCIVAL I C	102	427	506	740	
PEREL J	16	320			
PERRIN R	1257				
PETERKOP R K	97	101	128	154	270
	507	542	829	852	850
	990	1120	1135	1469	1505
	1515	1550	1552	1064	1905
	2002				
PETERSON J R	153	031			
PETERS T	305				
PETRINI D	1076				
PETROCELLI A W	941				
PETROV IV V	300				
PETRUNKIN A M	1115				
PHILPS A V	131	101	210	260	292
	312	439	530	569	600
	808	1043	1062	1407	
PHILBRICK J W	1090				
PIACEITE V	1570				
PIKUS S E	149				
PILVANKEVICH A N	004				
PIPKIN F H	522	1346			
POHLE R	503				
POMILLA F R	449	020	1522		

PAPP H P 1774  
 PATEUS J O 837  
 POTTIE R F 1687  
 POWLNEY F C 126  
 PRAMALLAGA RAO B 1742  
 PRASAD A H 861  
 PRASAD A 642  
 PRASAD S S 642 1262 1056  
 PREICE E R 1742  
 PRESNACOT L 821 1061 1476 1813  
 PRESSLEY G A 1874  
 PRIESTLY M 293  
 PRZYKORSKI A M 1910  
 PU R T 903  
 QUINN T P 199  
 RABIX L L 1576 1674 1854 1867 1880  
 RAETHER M 182  
 RAFF L H 1411  
 RAFIOULLAN A R 1659  
 RAIBLE V 1593  
 RAKHOVSKI V I 1001  
 RAKIEN M 606  
 RAKSAUER C 73 74 75 81 86  
 87 93 94 95 129  
 186  
 RANDOLPH P L 167  
 RAPP D 988 1105 1164 1292 1372  
 1396 1410 1451 1459 1460  
 RAY B B 920  
 REDKO T P 1758  
 REESE R H 446 525  
 REICHERT E 1111 1427 1431 1506  
 REICH H J 1753  
 REINERS H J 118  
 REINHARDT P M 1565  
 REITZ J R 359  
 REVALD V F 1531 1584  
 RIBE F L 602  
 RICE S A 1485  
 RICHARDSON J M 254  
 RIDLEY R O 428  
 RIEDE D 303 384  
 RIMEHART E A 554  
 RISK C J 218  
 ROBBER F 759  
 ROBINSON B B 1463  
 ROBINSON L B 387 812 1282  
 ROBINSON P D 545  
 ROEHLING D 786  
 ROSCOE R 45 1311  
 ROSENBERG L 381 917 1084  
 ROSE D C 1475  
 ROTENBERG M 836  
 ROTHENSTEIN M 445

ROTHE E M 26 888 978 1013 1018  
 1200  
 ROZALCHEV K I 1290  
 RUBIN K 329  
 RUBBERG E 1157  
 RUDD J B 159  
 RUDE H R H 57 523 574 1844 1772  
 1773 1840 1849  
 RUDDOLPH P 1116  
 RUFFINE R S 709  
 RUPPE A J 734  
 RUSCH M 76 126  
 RUSSEK A 1343  
 SACHS V 303  
 SALEPHO J A 1787  
 SALMONS A 499 1023 1052 1526 1587  
 SAMPSON O H 1082 1573 1676  
 SANDS B 610  
 SARAPH M 168 954 1025  
 SASAKI M 7 13 130 135  
 SAWYER G A 602  
 SAYERS J 807  
 SCARLON J M 910 1050  
 SCHAFFER O A 405  
 SCHAFFERNICHT W 92 202  
 SCHENK M 305  
 SCHENTER R E 1094  
 SCHEY M M 83 151 918 1033  
 SCHIFF M I 481  
 SCHONFELDER J L 1424 1646  
 SCHWAN B L 1281 1690 1705 1706 1748  
 1850 1863  
 SCHROETER K 82  
 SCHULTZ S 327 936  
 SCHULZ G J 299 388 318 319 324  
 328 517 529 558 932  
 984 1021 1090 1249 1310  
 1592 1924  
 SCHULZ P 126  
 SCHUTTEN J 1748 1782  
 SCHWARTZ C 447 498 988  
 SCHWARTZ S B 443 1772 1848 1849  
 SCOTT B L 1461  
 SCOTT R 1875  
 SEATON K J 155 168 484 412 419  
 422 431 453 484 533  
 585 712 714 715 719  
 721 722 740 843 889  
 1023 1037 1440 1844 1832  
 SEILER R 114  
 SENAN M L 639  
 SEVARD R P 675  
 SHAPIRO J 828  
 SHARP T E 1372 1451  
 SHAW C H 1191  
 SHELTON J M 1272  
 SHEPELENKO F P 457

SHERIDAN W F	992				
SHEVERA V S	504	1079	1648		
SHIELDS D B	822				
SHILOFF J C	200	1401			
SHIMON L L	504	1040	1078	1517	1648
	1742	1603	1001	1972	
SHINE W W	407				
SHOPENIK O B	1077	1521			
SHVETS O H	1507				
SIEMERTZ K	816				
SIL N C	515	1600	1703	1744	
SILVERMAN S H	372	373	374	374	377
	378	379	381	704	708
	799	800	803	857	1075
	1091	1063	1743		
SIMONS J H	675				
SIMPSON J A	300	692	1005	1347	1373
	1471	1527	1056		
SINGH B	1519				
SJOGREN H	290				
SKERBELE A	612	960	1410	1419	1481
	1024	1007			
SKINNER M F	190	200			
SKINNER B G	350	540	1025		
SKINNER H	651				
SKUBENICH V V	1047				
SLOAN I H	845	1092	1302		
SMIRNOV B H	1704				
SMITH A C H	1200	1003			
SMITH K	83	660	859	896	933
	1015	1022	1000	1345	1710
SMITH L G	35				
SMITH P T	10	216	224	224	
SMITH R A	1300				
SMITH S J	20	922	1406		
SMIT C	361	513	516	1570	
SMIT J A	223	315	361	513	516
	540				
SMYTH H	255				
SNYDER T H	1191				
SOPELHAN I	820	1061			
SOLITSYK E A	492	510	521		
SOMERVILLE J H	683				
SOMERVILLE W B	497	534	1074		
SOSNINIKOV A K	1000				
SPONER H	170				
SPRUCH L	301	917	1084	1443	1496
	1499	1500			
SQUIRES B E	579	1402			
STABLER R C	671				
STACEY B H	1770				
STAFFORD F E	1074				
STANTON M E	331				
STANTON R L	564				
STAROSTIN A H	710				
STAUFFER A D	307	1246			
STAVER T B	543				

STEPHENS R F	326	332	1031	1089	
STEIDL M	1431	1596			
STEINER B	839				
STEIN S	392	401			
STEPINSH P	835				
STEVENSON D	213	339	342	451	1224
STEWART D T	333	334	338	953	
STICKEL W	1065	1597			
STONF P H	350	1571	1005		
STOTT K C	902				
STRETT K	1301				
STROMMEIER B	121				
ST JOHN R H	405	554	742	912	942
	1049				
STUBER F A	1453				
STUECKELBERG E C	1010				
SUBIWA T	539				
SULLIVAN E	512	848			
SUNSHINE K	846	1490			
SUNAL D P	1680				
SUTTON D J	352				
SVAN P	430	433			
SWEENEY J P	564				
SWICK D A	983				
TAIT J H	1416	1653			
TAKAYANAGI K	724	1093	1452	1477	1488
	1500	1646			
TAKEDA S	1450				
TALBOT L	750				
TATE J T	10	21	214	216	647
	924				
TAYLOR A J	874	1416	1436	1524	1536
	1047				
TAYLOR J E	67				
TEMKIN A	204	400	498	503	512
	706	904	908	1030	1051
TEUTSCH W B	1195				
THALER R H	1094				
THIENE O	108				
THOMAS J J	177				
THOMAS L H	42				
THOMPSON J B	943				
THOMPSON N	989				
THOMENAKN P C	261	204	907		
THORBURN R	337	853	956		
THORNS S R	70				
TIEN P K	1094				
TIETZ T	204	400	562	745	1176
	1403	1510	1511		
TISONE G C	1080				
TOLK N	1071				
TOPSCHOWSKY H	1585				
TOWNSEND J S	195	197	199	201	
TOZER B A	337	356	357	853	865
	867				
TREFFTZ E	143	870	1046	1114	

THEPHA L V	1789				
TRUJILLO S M	26	848	978	1013	1010
	1208				
TULLY J	775				
TUNITSKII N M	723				
ULMER R	532				
UMWIN J J	243				
VAINShteIN L	754	826	1061	1097	1074
	1546	1813			
VALASEK J	1275				
VAN DER VIEL P J	1281	1090			
VAN DE VALLE R T	838				
VAN EGMOND M	315				
VAN REBENHOUTER H	720	775	1053	1054	1122
VAN VOORNIS C C	2				
VAN VOORNIS S M	173				
VAN ZYL B	1501	1503			
VARNERIN L J	240				
VANSANTVY C	792	814	1017		
VAUGHAN A L	17				
VEKLEMMO M A	560	716			
VELDME V	101	838	835	836	844
	1319	1426	1472	1547	1548
	1555	1576	1582	1674	
	1866	1867	1868		
VEITTERLEIN P	96				
VINCENT D	421				
VINKALNS I ZH	844	1097	1472	1548	1582
	1878	1879			
VOLKOVA L M	344	414	474	505	749
	755	1533			
VON ENGEL A	336	352			
VOSMALL R E	439				
VOSS M	113				
VREDENGERB M J	361				
VREESWIJK J A	269				
VRIENS L	1060	1457	1468	1504	
VRUBLEVSKAYA M A	1909				
WADDINGTON J F	1003				
WAHLIN M B	1752				
WAHL J J	446				
WALDRON M F	1577				
WARREN J M	1230	1231			
WATANABE M	365				

WHITE D	635				
WHITE E R	582				
WHITE J V	280				
WHITNEY J D	665				
WIESE W L	582				
WILKINS R L	1665				
WILLIAMSON M A	1590				
WILLIAMSON J M	478	1256			
WILLIAMS A	544				
WILLIAMS K L	1788				
WILLIAMS S E	989	1296			
WINTERS M F	1406				
WITTING M L	1456				
WITTHACK K	1478	1812			
WOJTCZAK L	286				
WOLF R	880				
WOMER R L	668				
WONG S C	687				
WOODCOCK A M	1286	1287			
WOODWARD C E	659				
WOODLEY R	923				
WOUDENBERG J P M	122	125			
WU C S	1196				
WU T Y	43	368	567	1146	1196
YAKHONTOVA V E	464	477	1323		
YAMANOUCHI T	208	247	248	366	408
	463	552			
YAVORSKY B	202	272	281	282	557
	783	977	1103		
YUREV V G	149				
YU F C	1146				
ZACHMANN E	171				
ZAITSEVA M G	1081				
ZANSTRA M	358				
ZAPESOCHEMYI I P	78	343	475	504	508
	808	882	1040	1076	1077
	1078	1079	1233	1517	1521
	1583	1648	1680	1683	1801
	1823	1895	1972		
ZARE R M	1501	1503			
ZHUKHAROVA T V	1775	1853			
ZIESEL J P	283	1167	1530	1926	
ZIRIN M	443	930			
ZWICKY F	657				